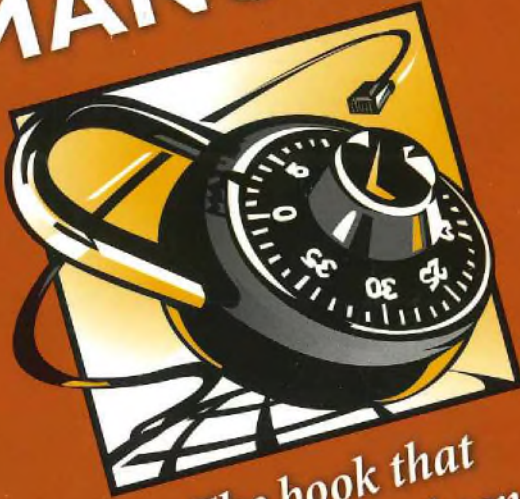# Windows XP Pro

Second Edition

Covers Service Pack 2

THE MISSING MANUAL

The book that
should have been
in the box

MASTERING THE CORPORATE PC

David Pogue
Craig Zacker
L.J. Zacker

POGUE PRESS™
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Windows XP Pro *Second Edition*

THE MISSING MANUAL

*The book that
should have been
in the box*

What the Reviewers Said

Pogue is a clear and gifted writer who is able to cut through the technobabble and show the reader how to solve problems and get stuff done. The Missing Manual is an ideal companion for both first-time XP users and more experienced users who find themselves flummoxed by the software.

—Larry Blasko, Associated Press

A visit to *www.missingmanuals.com* can offer instant relief to headaches generated by mounting XP glitches. David Pogue, a columnist for *The New York Times* and the genius behind the Missing Manual series of books, has adapted his easy-to-follow, humorous style of writing to help us survive our often-exasperating bouts with computer mania. This is an extremely easy-to-follow guide to everything you need to know about Windows XP without insulting our intelligence, as we sometimes find in the 'Idiots' or 'Dummies' series of books, giving us step-by-step solutions to our problems.

—Mike Berman, Scripps Howard News Service

A masterful treatment of Windows XP, written in a direct and lively style.

—Ed Laskowski, The Vista PC Journal

I enjoyed following the pages in this sensibly written guide. It is the way to go for first-time and intermediate PC fans. The author's warm, witty, and jargon-free writing style is applied to every nook of Windows XP.

—Sam Gardner, PC News

[This book is] outstanding in the way it presents its subject matter and in the amount of material it covers, yet manages to present it all in an easily understood manner. If you are looking for a good book on Windows XP, this is it. I highly recommend it for beginners as well as for more advanced users, for the learning of Windows XP as well as for troubleshooting. It is truly 'the book that should have been in the box' and will help you get the most out of your Windows XP computer.

—Gerhard R. Fischer, Charlotte Bytes

This book will help first-time and intermediate PC fans greatly, and it has enough depth to aid experienced Windows users, too…Since it stays clear of jargon, and does an excellent job of explaining any technical terms it has to use, a beginner should have no problem understanding the material.
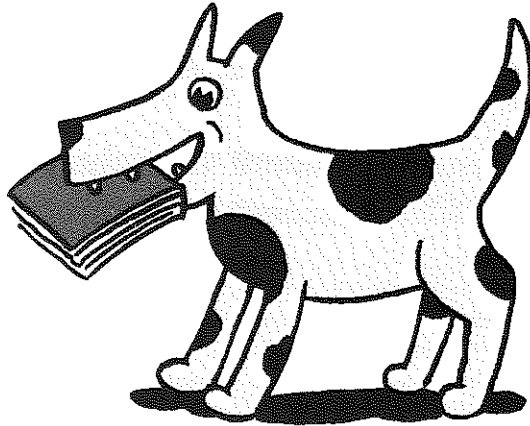
—Bob Esch, The Databus

If you've ever struggled with XP (and if that's the OS on your notebook or desktop, you're lying if you say you haven't), this book offers rock-solid advice as well as terrific tips on every crumb XP has to offer.

— Michael Cahlin, Emerging Tip World

Windows XP Pro *Second Edition*

THE MISSING MANUAL

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Windows XP Pro: The Missing Manual

by David Pogue, Craig Zacker, and L.J. Zacker

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Table of Contents

Part Two: The Components of Windows XP

TABLE OF CONTENTS

HP Inc. - Exhibit 1007 - Page 7

Part Three: Windows Online

HP Inc. - Exhibit 1007 - Page 11

The Missing Credits

About the Authors

David Pogue is the weekly computer columnist for the *New York Times,* an Emmy-nominated correspondent for CBS News, and the creator of the Missing Manual series. He's the author or co-author of 35 books, including ten in this series and six in the "For Dummies" line (including *Magic, Opera, Classical Music,* and *Macs*). In his other life, he's a former Broadway show conductor, a magician, and a pianist.

Photos and other goodies await at *www.davidpogue.com.* David welcomes feedback about Missing Manual titles by email: *david@pogueman.com.* (If you need technical help, however, please refer to the sources in Chapter 4.)

Craig Zacker is a writer, editor, and networker whose computing experience began in the days of teletypes and paper tape. After earning a Masters Degree in English and American Literature from New York University, Craig worked extensively on the integration of Windows NT into existing internetworks, supported fleets of Windows workstations, and was employed as a technical writer, content provider, and Webmaster for the online services group of a large software company. Since devoting himself to writing and editing full-time, Craig has authored or contributed to many books on networking topics, operating systems, and PC hardware. He has also developed online training courses for the Web and published articles with top industry publications. For more information, see *http://www.zacker.com.*

L.J. Zacker began working with mainframe and personal computers in the mid 1980s, and has since worked as a network administrator, programmer, and security consultant for mainframe systems and PC LANs. Now a full-time author and editor, L.J. has contributed to numerous books and articles for various publishers including Microsoft Press, SAMS Publishing, and *Windows 2000* magazine.

About the Creative Team

Nan Barber (copy editor, first edition) co-authored *Office X for the Macintosh: The Missing Manual* and *Office 2001 for Macintosh: The Missing Manual.* As the principal copy editor for this series, she has edited the titles on Mac OS X, Dreamweaver, Windows XP Home Edition, and others. Email: *nanbarber@mac.com.*

John Cacciatore (copy editor, this edition) is a freelance writer, editor, and proofreader. For the past 10 years, he has tangled with semi-colons, dashes, and ellipses from his suburban Massachusetts home. Naturally, this means he's also a Red Sox lifer. Email: *j_cacciatore@yahoo.com.*

Rose Cassano (cover illustration) has worked as an independent designer and illustrator for 20 years. Assignments have spanned everything from the nonprofit sector to corporate clientele. She lives in beautiful Southern Oregon, grateful for the miracles of modern technology that make living and working there a reality. Email: *cassano@cdsnet.net.* Web: *www.rosecassano.com.*

David A. Karp (technical editor, this edition) is the author of nine power-user books, including the bestselling *Windows XP Annoyances for Geeks* (Second Edition) and *eBay Hacks: 100 Industrial-Strength Tips & Tools.* You can sometimes find his articles in PC Magazine and ZTrack Magazine, or on Annoyances.org. When he's not inserting arcane pop culture references into his writing, he spends his time as a cyclist, activist, pessimist, optimist, photographer, and moviegoer.

Phil Simpson (design and layout) works out of his office in Stamford, Connecticut, where he has had his graphic design business since 1982. He is experienced in many facets of graphic design, including corporate identity, publication design, and corporate and medical communications. Email: *pmsimpson@earthlink.net.*

Acknowledgments

The Missing Manual series is a joint venture between the dream team introduced on these pages and O'Reilly & Associates: Tim O'Reilly, Mark Brokering, and company.

I'm grateful to all of them, and to and Chuck Brandstater, Danny Marcus, and Sada Preisch for their proofreading smarts. Thanks to David Rogelberg for believing in the idea, and above all, to Jennifer, Kelly, Tia, and Jeffrey, who make these books—and everything else—possible.

The Missing Manual Series

Missing Manual books are designed to be superbly written guides to computer products that don't come with printed manuals (which is just about all of them). Each book features RepKover, a binding that lets the book lie flat without the assistance of cinder blocks; cross-references to specific page numbers (not just "See Chapter 14"); and a promise never to use an apostrophe in the possessive word *its.* Current and upcoming titles include:

- *Dreamweaver MX 2004: The Missing Manual* by David Sawyer McFarland
- *Windows XP Home Edition: The Missing Manual* by David Pogue
- *Mac OS X: The Missing Manual, Tiger Edition,* by David Pogue
- *iPod & iTunes: The Missing Manual* by J.D. Biersdorfer
- *Google: The Missing Manual* by Sarah Milstein & Rael Dornfest
- *Windows XP Power Hound* by Preston Gralla
- *iLife '04: The Missing Manual,* by David Pogue
- *Excel: The Missing Manual,* by Matthew MacDonald

Introduction

For years, the evolution of Microsoft Windows ran along two different tracks. First, there were the home versions: Windows 95, Windows 98, and Windows Me. These were the Windows for everyday individuals. They were compatible with just about everything on earth, including games of every description—but where stability was concerned, they weren't what you'd call Rocks of Gibraltar.

Second, there were the corporate versions of Windows: Windows NT and Windows 2000. These versions of Windows rarely froze or crashed, and they featured industrial-strength security. However, they weren't anywhere near as compatible as the home versions of Windows. If you tried to run the Barney the Dinosaur CD-ROM at work, for example, you were out of luck (if not out of a job).

This schizophrenic approach to the evolution of Windows entailed its share of drawbacks. It meant twice as much engineering effort for Microsoft, twice as much tech-support knowledge by computer companies, and twice as much work for software companies, which had to ensure compatibility with both systems. It wasn't even so great for you, the PC fan, because you had to worry about compatibility with each piece of software you bought. And it was entirely possible to get confused when sitting down in front of a PC running a different version of Windows.

The goal of Windows XP was simple: Combine the two versions of Windows into a single new operating system that offers the best features of both.

For the most part, Microsoft succeeded. Ending the era of dual operating systems offers both you and Microsoft huge simplicity benefits—now there's only one operating system to learn, discuss, and troubleshoot. It also offers a big payoff to hardware and software manufacturers, who now have to ensure compatibility with only one operating system.

If you're used to one of the home versions, you may be surprised by some of the resulting changes; under the colorful, three-dimensional new skin of Windows XP Home Edition lurks Windows 2000, which includes some of its beefy security features. This book will help you get through them.

If you're accustomed to Windows 2000 or Windows NT, you'll probably be happy to hear that XP Professional is built on the same bulletproof frame. All you have to get used to are XP's greater compatibility with a wide range of hardware and software, and Windows' new look (and even that can be turned off, if you like).

Either way, you've entered a new age: the unified Windows era. Now you, Microsoft, and software companies can get used to the notion that everybody is using the same Windows. (There are still two different *editions* of Windows XP —Professional and Home Edition—but they're not really two different operating systems, as noted on page 14.)

About This Book

Despite the many improvements in Windows over the years, one feature hasn't improved a bit: Microsoft's documentation. In fact, with Windows XP, you get no printed user guide at all. To learn about the thousands of pieces of software that make up this operating system, you're expected to read the online help screens.

Unfortunately, as you'll quickly discover, these help screens are tersely written, offer very little technical depth, and lack examples and illustrations. You can't even mark your place, underline, or read them in the bathroom. In Windows XP, many of the help screens are actually on Microsoft's Web site; you can't see them without an Internet connection. Too bad if you're on a plane somewhere with your laptop.

The purpose of this book, then, is to serve as the manual that should have accompanied Windows XP Pro. In these pages, you'll find step-by-step instructions for using almost every Windows feature, including those you may not even have quite understood, let alone mastered.

Windows XP Pro: The Missing Manual is designed to accommodate non-professional readers at every technical level. The primary discussions are written for advanced-beginner or intermediate PC users. But if you're a first-time Windows user, special sidebar articles called Up To Speed provide the introductory information you need to understand the topic at hand. If you're an advanced PC user, on the other hand, keep your eye out for similar shaded boxes called Power Users' Clinic. They offer more technical tips, tricks, and shortcuts for the veteran PC fan.

Service Packs

As you probably know, Windows is a creature that constantly evolves. Every few weeks, Microsoft issues another bundle of tiny patches: drivers for new add-ons, patches for bugs, seals for newly discovered security holes, and so on. (Automatic Updates is responsible for installing them; see page 331.)

But once a year or so, the company rolls all of these minor updates into one mama patch called a Service Pack. The first one, Service Pack 1, was largely designed to comply with the U.S. Justice Department's antitrust decree (page 179). The second, Service Pack 2, debuted in the fall of 2004 and was far more important; it was designed to make Windows more secure against the sort of Internet attacks that was making life miserable for the PC faithful (Chapter 10).

Your PC may have one, two, or none of these service packs. To find out, open your Start menu; right-click My Computer; and choose Properties from the shortcut menu. You'll see the label "Service Pack 1" or "Service Pack 2" if you have them. (If you have SP2, you also have SP1.)

About the Outline

This book is divided into six parts, each containing several chapters:

- **Part 1, The Windows XP Desktop,** covers everything you see on the screen when you turn on a Windows XP computer: icons, windows, menus, scroll bars, the Recycle Bin, shortcuts, the Start menu, shortcut menus, and so on.

- **Part 2, The Components of Windows XP,** is dedicated to the proposition that an operating system is little more than a launch pad for *programs*. Chapter 5 describes how to work with applications in Windows—launch them, switch among them, swap data between them, use them to create and open files, and so on.

  This part also offers an item-by-item discussion of the individual software nuggets that make up this operating system. These include not just the items in your Control Panel folder, but also the long list of free programs that Microsoft threw in: Windows Media Player, Movie Maker 2, WordPad, and so on.

- **Part 3, Windows Online,** covers all the special Internet-related features of Windows, including the wizards that set up your Internet account, Outlook Express (for email), Internet Explorer 6 (for Web browsing), chatting or videoconferencing with MSN Messenger, and so on. It also helps you fortify your PC, using Service Pack 2 and the Windows Firewall.

- **Part 4, Plugging into Windows XP,** describes the operating system's relationship with equipment you can attach to your PC—scanners, cameras, disks, printers, and so on. Special chapters describe faxing, fonts, troubleshooting your PC, and preventing problems from even arising.

- **Part 5, Life on the Network,** honors the millions of households and offices that now contain more than one PC. If you work at home or in a small office, these chapters show you how to build your own network; if you work in a corporation where some highly paid professional network geek is on hand to do the troubleshooting, these chapters show you how to exploit XP Pro's considerable networking prowess.

At the end of the book, three appendixes provide guidance in installing this operating system, a menu-by-menu explanation of the Windows XP Pro desktop commands, and an introduction to editing the Registry.

About→These→Arrows

Throughout this book, and throughout the Missing Manual series, you'll find sentences like this: "Open the Start→My Computer→Local Disk (C:)→Windows folder." That's shorthand for a much longer instruction that directs you to open three nested icons in sequence, like this: "Click the Start menu to open it. Click My Computer in the Start menu. Inside the My Computer window is a disk icon labeled Local Disk (C:); double-click it to open it. Inside *that* window is yet another icon called Windows. Double-click to open it, too."

Similarly, this kind of arrow shorthand helps to simplify the business of choosing commands in menus, as shown in Figure I-1.
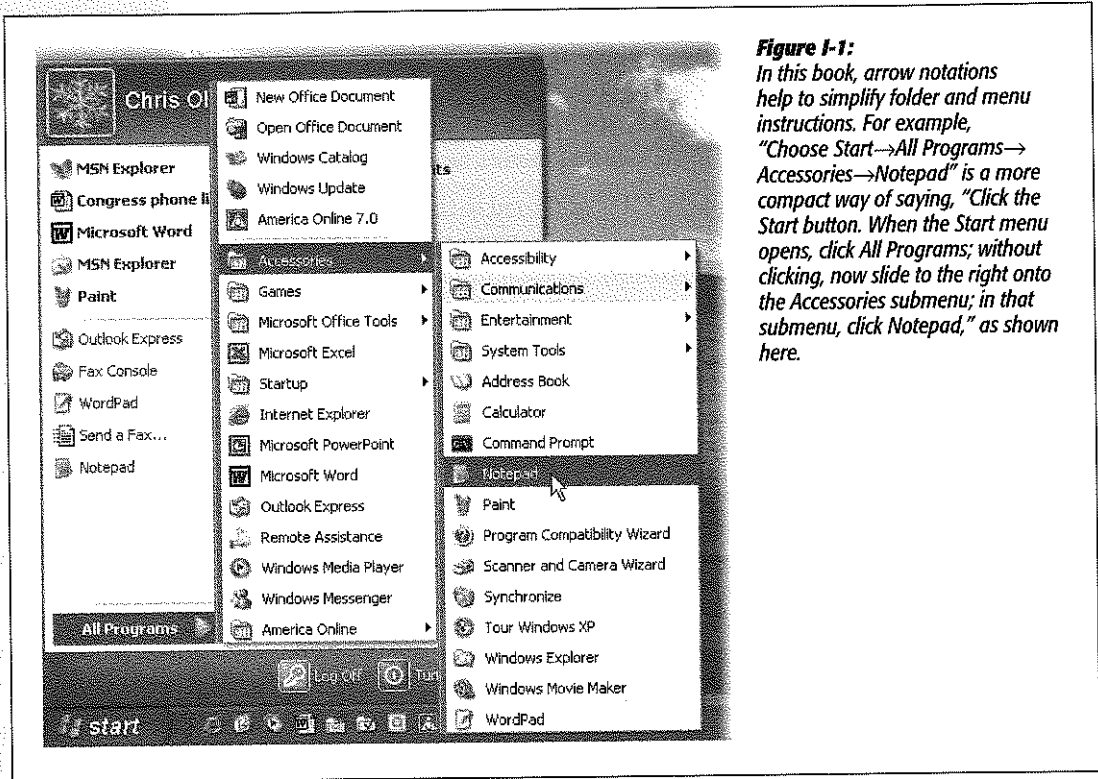
Figure I-1:
In this book, arrow notations help to simplify folder and menu instructions. For example, "Choose Start→All Programs→ Accessories→Notepad" is a more compact way of saying, "Click the Start button. When the Start menu opens, click All Programs; without clicking, now slide to the right onto the Accessories submenu; in that submenu, click Notepad," as shown here.

About Shift-Clicking

Here's another bit of shorthand you'll find in this book (and others): instructions to *Shift-click* something. That means you should hold down the Shift key, and then click before releasing the key. If you understand that much, the meaning of instructions like "Ctrl-click" and "Alt-click" should be clear.

About MissingManuals.com

You're invited and encouraged to submit corrections and updates to this book's Web page at *www.missingmanuals.com*. (Click the book's name, and then click the Errata link.) In an effort to keep the book as up-to-date and accurate as possible, each time we print more copies of this book, we'll make any corrections you've suggested.

Even if you have nothing to report, you should check that Errata page now and then. That's where we'll post a list of the corrections and updates we've made, so that you can mark important corrections into your own copy of the book, if you like.

In the meantime, we'd love to hear your suggestions for new books in the Missing Manual line. There's a place for that on the Web site, too, as well as a place to sign up for free email notification of new titles in the series.

The Very Basics

To get the most out of Windows with the least frustration, it helps to be familiar with the following concepts and terms. If you're new to Windows, be prepared to encounter these words and phrases over and over again—in the built-in Windows help, in computer magazines, and in this book.

Windows Defined

Windows is an *operating system,* the software that controls your computer. It's designed to serve you in several ways:

- **It's a launching bay.** At its heart, Windows is a home base, a remote-control clicker that lets you call up the various software programs (applications) you use to do work or kill time. When you get right down to it, applications are the real reason you bought a PC.

  Windows XP is a well-stocked software pantry unto itself; for example, it comes with such basic programs as a Web browser, email program, simple word processor, and calculator. Windows XP comes with eleven games, too, several of which you can play live against other people on the Internet. (Chapter 6 covers all of these freebie programs.)

  If you were stranded on a desert island, the built-in Windows XP programs could suffice for everyday operations. But if you're like most people, sooner or later, you'll buy and install more software. That's one of the luxuries of using Windows: You can choose from a staggering number of add-on programs. Whether you're a left-handed beekeeper or a German-speaking nun, some company somewhere is selling Windows software designed just for you, its target audience.

- **It's a file cabinet.** Every application on your machine, as well as every document you create, is represented on the screen by an *icon* (see Figure I-2). You can organize these icons into little onscreen file folders. You can make backups (safety copies)

by dragging file icons onto a floppy disk or blank CD, or send them to people by email. You can also trash icons you no longer need by dragging them onto the Recycle Bin icon.
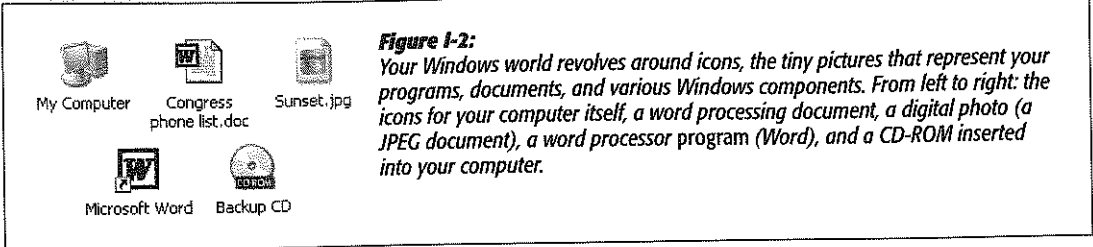
Figure I-2:
Your Windows world revolves around icons, the tiny pictures that represent your programs, documents, and various Windows components. From left to right: the icons for your computer itself, a word processing document, a digital photo (a JPEG document), a word processor program (Word), and a CD-ROM inserted into your computer.

- **It's your equipment headquarters.** What you can actually *see* of Windows is only the tip of the iceberg. An enormous chunk of Windows is behind-the-scenes plumbing that controls the various functions of your computer—its modem, screen, keyboard, printer, and so on.

The right mouse button is king

One of the most important features of Windows isn't on the screen—it's under your hand. The standard mouse has two mouse buttons. You use the left one to click buttons, highlight text, and drag things around on the screen.

When you click the right button, however, a *shortcut menu* appears onscreen, like the ones shown in Figure I-3. Get into the habit of *right-clicking* things—icons, folders, disks, text in your word processor, buttons on your menu bar, pictures on a Web page, and so on. The commands that appear on the shortcut menu will make you much more productive and lead you to discover handy functions you never knew existed.
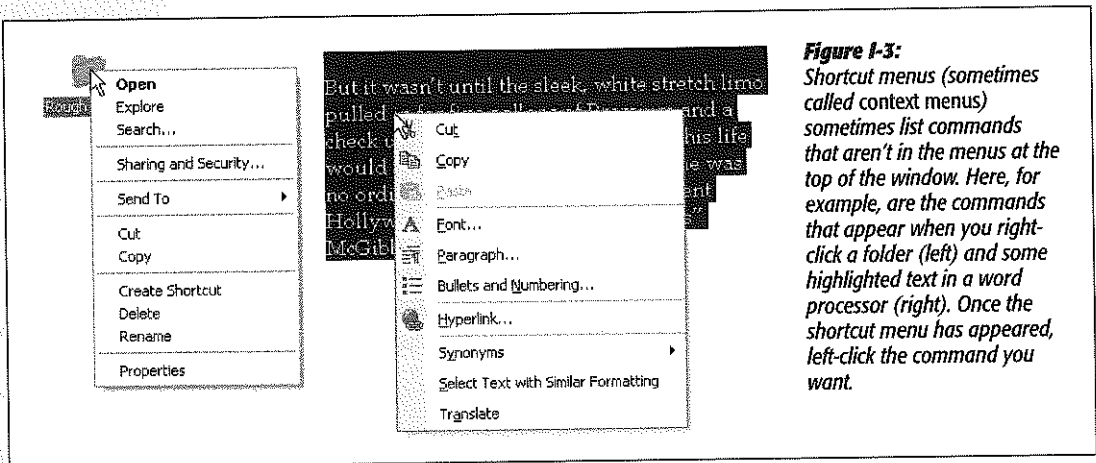
Figure I-3:
Shortcut menus (sometimes called context menus) sometimes list commands that aren't in the menus at the top of the window. Here, for example, are the commands that appear when you right-click a folder (left) and some highlighted text in a word processor (right). Once the shortcut menu has appeared, left-click the command you want.

This is a big deal: Microsoft's research suggests that nearly 75 percent of Windows users don't use the right mouse button, and therefore miss hundreds of timesaving shortcuts. Part of the rationale behind Windows XP's redesign is putting these functions out in the open. Even so, many more shortcuts remain hidden under your right mouse button.

Tip: Microsoft doesn't discriminate against left-handers...much. You can swap the functions of the right and left mouse buttons easily enough.

In the Control Panel window (page 249), open the Mouse icon. When the Mouse Properties dialog box opens, click the Buttons tab, and turn on the "Switch primary and secondary buttons" checkbox. Then click OK. Windows now assumes that you want to use the *left* mouse button as the one that produces shortcut menus.

Wizards = Interviews

A *wizard* is a series of screens that walks you through the task you're trying to complete. Wizards make configuration and installation tasks easier by breaking them down into smaller, more easily digested steps. Figure I-4 offers an example.

Figure I-4:
Wizards (interview screens) are everywhere in Windows. On each of the screens, you're supposed to answer a question about your computer or your preferences, and then click a Next button. When you click the Finish button on the final screen, Windows whirls into action, automatically completing the installation or setup.
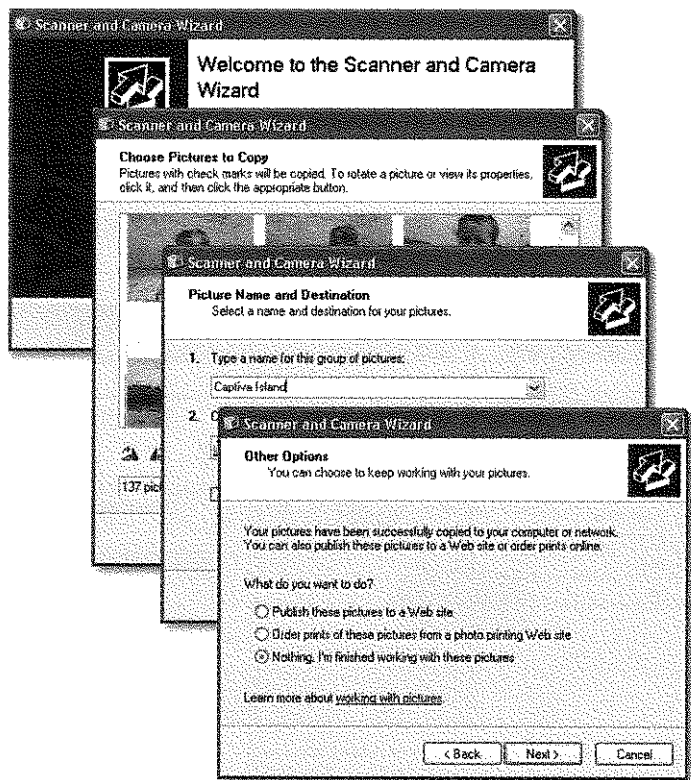
There's more than one way to do everything

No matter what setting you want to adjust, no matter what program you want to open, Microsoft has provided five or six different ways to do it. For example, here are the various ways to delete a file: press the Delete key, choose Delete from the File menu at the top of a window, drag the file icon onto the Recycle Bin, or right-click the file name and choose Delete from the shortcut menu.

Pessimists grumble that there are too many paths to every destination, making it much more difficult to learn Windows. Optimists point out that this abundance of approaches means that almost everyone will find, and settle on, a satisfying method for each task. Whenever you find a task irksome, remember you have other options.

You can use the keyboard for everything

In earlier versions of Windows, underlined letters appeared in the names of menus and dialog boxes. These underlines were clues for people who found it faster to do something by pressing keys than by using the mouse.

The underlines are hidden in Windows XP, at least in disk and folder windows (they still appear in your individual software programs). If you miss them, you have two options:

- Make them come back full-time, using the control panel's Display program (see page 261).

- Make them reappear only when you summon them—by pressing the Alt key, Tab key, or an arrow key whenever the menu bar is visible. (When operating menus, you can release the Alt key immediately after pressing it.) In this book, in help screens, and computer magazines, you'll see key combinations indicated like this: Alt+S (or Alt+ whatever the letter key is).
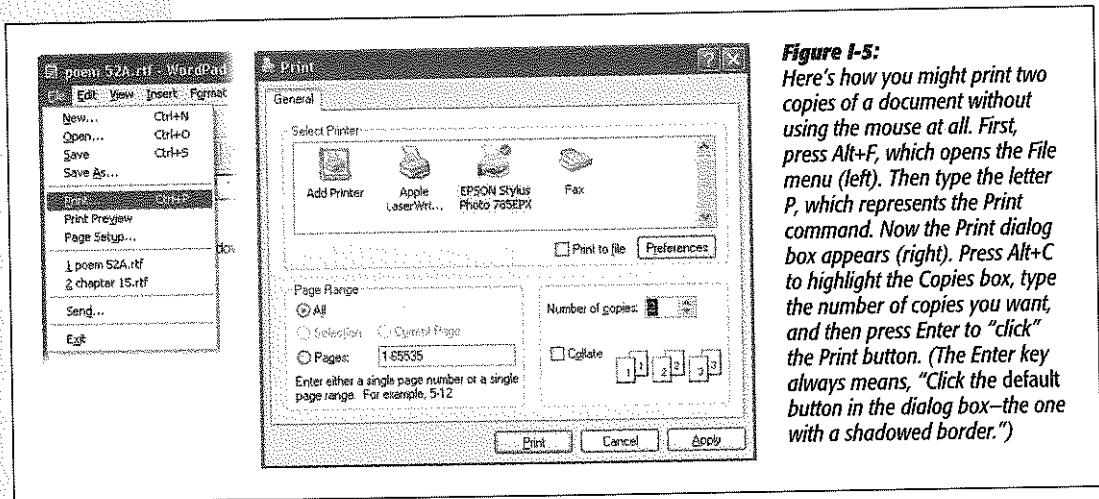
Figure I-5:
Here's how you might print two copies of a document without using the mouse at all. First, press Alt+F, which opens the File menu (left). Then type the letter P, which represents the Print command. Now the Print dialog box appears (right). Press Alt+C to highlight the Copies box, type the number of copies you want, and then press Enter to "click" the Print button. (The Enter key always means, "Click the default button in the dialog box—the one with a shadowed border.")

Tip: Pressing the Windows logo key (next to the Alt key on most recent keyboards) opens the Start menu *and* turns on its little underlines. Microsoft assumed, logically enough, that if you're enough of a keyboard lover to have opened the Start menu from the keyboard, you're probably going to want to use the keyboard to trigger the commands *in* the Start menu, too.

Once the underlines are visible, you can open a menu by pressing the underlined letter (F for the File menu, for example). Once the menu is open, press the underlined letter key that corresponds to the menu command you want. Or press Esc to close the menu without doing anything. (In Windows, the Esc key always means *cancel* or *stop*.)

If choosing a menu command opens a dialog box, you can trigger its options, too, by pressing Alt along with the underlined letters. (Within dialog boxes, you can't press and release Alt; you have to hold it down while typing the underlined letter.)

As shown in Figure I-5, it's a rare task indeed that you can't perform entirely from the keyboard.

You could spend a lifetime changing properties

You can't write an operating system that's all things to all people, but Microsoft has sure tried. You can change almost every aspect of the way Windows looks and works. You can replace the gray backdrop of the screen (the *wallpaper*) with your favorite photograph, change the typeface used for the names of your icons, or set up a particular program to launch automatically every time you turn on the PC.

When you want to change some *general* behavior of your PC, like how it connects to the Internet, how soon the screen goes black to save power, or how quickly a letter repeats when you hold down a key, you use the Control Panel window (see Chapter 8).

Figure I-6:
One quick way to find out how much space is left on your hard drive is to right-click the corresponding icon and choose the Properties command (left). The Properties dialog box appears (right), featuring a handy disk-space graph.

HP Inc. - Exhibit 1007 - Page 22
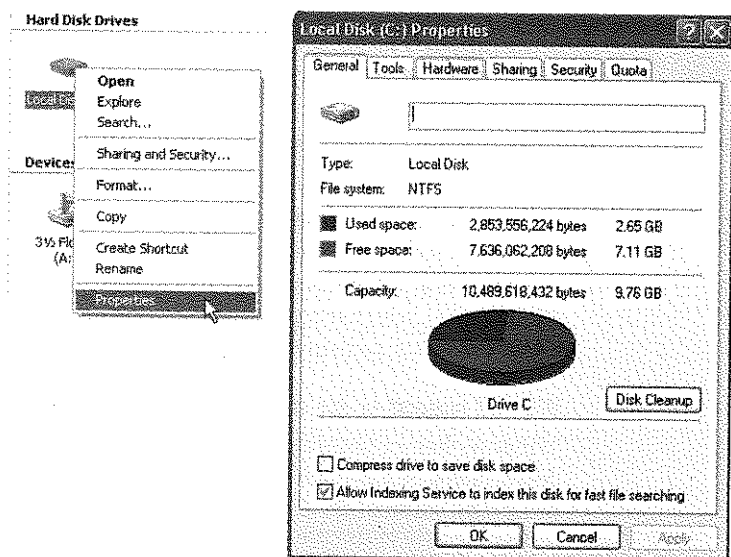
Many other times, however, you may want to adjust the settings of only one *particular* element of the machine, such as the hard drive, the Recycle Bin, or a particular application. In those cases, simply right-click the corresponding icon. In the resulting shortcut menu, you'll often find a command called Properties. When you click it, a dialog box appears containing settings or information about that object, as shown in Figure I-6.

Tip: As a shortcut to the Properties command, just highlight an icon and then press Alt+Enter.

It's also worth getting to know how to operate *tabbed dialog boxes*, like the one shown in Figure I-6. These are windows that contain so many options, Microsoft has had to split them up into separate panels, or *tabs*. To reveal a new set of options, just click a different tab (called General, Tools, Hardware, Sharing, Security, and Quota in Figure I-6). These tabs are designed to resemble the tabs at the top of file folders.

Tip: You can switch tabs without using the mouse by pressing Ctrl+Tab (to "click" the next tab to the right) or Ctrl+Shift+Tab (for the previous tab).

Every piece of hardware requires software

When computer geeks talk about their *drivers*, they're not talking about their chauffeurs (unless they're Bill Gates); they're talking about the controlling software required by every hardware component of a PC.

The *driver* is the translator between your PC's brain and the equipment attached to it: mouse, keyboard, screen, CD-ROM drive, scanner, digital camera, palmtop, and so on. Without the correct driver software, the corresponding piece of equipment doesn't work at all.

When you buy one of these gadgets, you receive a CD containing the driver software. If the included driver software works fine, then great. If your gadget acts up, however, remember that equipment manufacturers regularly release improved (read: less buggy) versions of these software chunks. (You generally find such updates on the manufacturers' Web sites.)

Fortunately, Windows XP comes with drivers for over 12,000 components, saving you the trouble of scavenging for them on a disk or on the Internet. (That's one of XP's big advantages over Windows 2000, which was driver-poor by comparison.) This gigantic library is the heart of Microsoft's heavily advertised *Plug and Play* feature (Chapter 14), which lets you connect a new gadget to your PC without even thinking about the driver software.

It's not meant to be overwhelming

Windows has an absolutely staggering array of features. You can burrow six levels down, dialog box through dialog box, and never come to the end of it. There are enough programs, commands, and help screens to keep you studying the rest of your life.

It's crucial to remember that Microsoft's programmers created Windows in modules—the digital-photography team here, the networking team there—with different audiences in mind. The idea, of course, was to make sure that no subset of potential customers would find a feature lacking.

But if *you* don't have a digital camera, a network, or whatever, there's absolutely nothing wrong with ignoring everything you encounter on the screen that isn't relevant to your setup and work routine. Even Bill Gates doesn't use every single feature of Windows XP.

What's New in Windows XP

Windows XP is the most dramatic Windows overhaul since the introduction of Windows 95. As noted earlier, Microsoft wanted to merge its home line (the friendly but cranky Windows 95, 98, and Me) with its corporate line (the unattractive but rock-solid Windows NT and 2000) into a single, unified operating system that offers the best of both.

But this flowing of two streams into a single mighty river is only the beginning. Some of the following features will seem new only if you're used to Windows 2000, and others only if you're coming from, say, Windows Me. The rest of this section is an overview of the other goodies Windows XP offers.

Stability

The biggest news in Windows XP is that it's based on Windows 2000. Its features, including *protected memory* (if one program crashes, it isn't allowed to poison the well of memory that other programs use) and strong network security features, give you vastly improved stability. In fact, it's possible to go for weeks without having to restart a crashed PC (as opposed to days or, well, minutes with Windows Me). That's not to say that individual programs don't still bomb now and then—they do—but they no longer take down your whole computer.

Here's what else Microsoft has done to make your PC more stable:

- **System File Protection.** Before Windows XP (and Me), the installer for some new piece of software might have replaced some important Windows file with an older version, resulting in instability or crashes. When an installer tries to do that in Windows XP, it gets the door slammed in its face.

  Of course, if its installer is unable to replace the component it wants to replace, your new software might not run. However, thanks to System File Protection, you'll at least be no worse off than before you performed the installation.

- **System Restore.** Windows XP memorizes the condition of its own system files before you perform any kind of installation. If you find your PC doesn't work properly after installing some new piece of software, you can "roll back" your computer to its earlier, healthy condition. Once again, you've just undone the installation, so you can't use that new piece of software or equipment, but you've also saved lots of time troubleshooting. System Restore is a quick alternative to trying to return

HP Inc. - Exhibit 1007 - Page 24

your machine, step by step, to the way it was before things went wrong. Bear in mind, though, that System Restore can't recover or monitor any changes to your own files (documents, email, and so on)—only system files and programs.

- **More careful driver management.** As noted above, you need driver software for every component of your PC. Windows XP interrupts you with a warning message whenever some installer tries to put an incompatible driver onto your system. And if that roadblock fails, you can use the Driver Rollback feature (page 453) to restore any driver that got replaced by a flakier one.

- **AutoUpdate.** Like any software company, Microsoft regularly releases small fixes, patches, and updates to Windows. In the old days, it was your job to read the magazines or scan the Web sites for news about these updates. Windows XP takes over that task for you; whenever you're connected to the Internet, Windows invisibly sneaks over to the Microsoft Web site, checks for updates to your software components, downloads any that it thinks you need, and pops up a window offering to install the patch for you. (You can turn off this feature if it feels too much like Big Brother.) See Chapter 16 for details.

A Cosmetic Overhaul

As you've probably discovered already, Windows XP looks much more modern and colorful than its cosmetically challenged predecessors. The taskbar and window borders are now a shimmering, backlit blue; the redesigned icons have a 3-D shadowed look; tiny animations liven up the desktop; and the Recycle Bin is now in the lower-right corner, as though it's the period at the end of a screen-size paragraph.

Other functional and cosmetic enhancements:

- When the taskbar gets crowded, it now automatically consolidates the window buttons of each program. If you're working on six Word documents, you might see just a single Microsoft Word button on the taskbar, which you can use as a pop-up menu to switch to a specific document.

- The Start menu is now a better-organized, two-column affair—recently used programs are listed in the left column, and everything else (My Documents, My Computer, Control Panel, Search, and so on) is in the right.

- The Control Panel can open in two different views: either as a window full of icons, as before (Classic View), or in tidy function-related categories (Category View). The beginning of Chapter 8 makes this new setup clear.

- There must be a neat freak on the XP design team, because Windows XP is practically obsessive about keeping your desktop and taskbar clear of clutter. A new installation of Windows XP presents you with an immaculate desktop graced by only a single icon, the Recycle Bin. (Of course, computer companies may still install desktop icons on new PCs.) The software even interrupts you every few weeks, offering to sweep away rarely used desktop icons into a special folder. Similarly, the *notification area* (once called the taskbar *tray*) hides little buttons that you rarely

use (page 92). If it could, Windows XP would reach out to pluck bits of spinach from your teeth.

By the way, if you don't care for the XP cosmetic changes, you can turn them off selectively, which makes your desktop look and work just as it did in previous versions of Windows (you'll find instructions throughout this book in special boxes labeled "Nostalgia Corner"). You can also turn off the various animations, drop shadows, and other special effects for a measurable speed boost on slower PCs (see page 297).

Pictures, Music, and Movies

Windows XP gets a gold star for its new picture, music, and movie features. For example, the simple act of plugging a digital camera into your PC opens a dialog box that offers to transfer your photos from camera to hard drive.

Windows XP comes with version 8, 9, or 10 of Windows Media Player (depending on when you got your copy), which lets you play movies, listen to distant radio stations over the Internet, burn music CDs, and transfer music files to your portable MP3 player. Chapter 7 tells all.

Miscellaneous Touch-Ups

Nips and tucks are everywhere in Windows XP. For example:

- XP machines start up and wake up faster than in previous Windows versions.

- Desktop windows now offer a left-side *task pane* (Figure I-7) that offers one-click access to jobs you might need to do.

Figure I-7:
The new task pane commands are sometimes extremely useful ("Set as desktop background" when you click a picture file). Other times, they're invitations to send money to Microsoft and its partners ("Shop for music online," "Order prints online"). In any folder containing photo or music files, like the MP3 files shown here, controls appear that let you conduct a slide show, or a concert of your MP3 files, right there on the desktop.
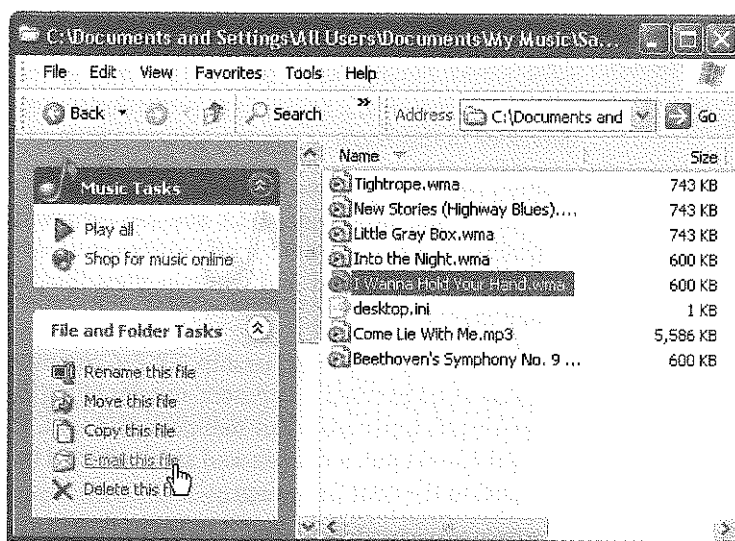
- Windows XP comes with Internet Explorer 6, an upgraded Web browser that offers better security features and a couple of nifty picture-viewing options (Chapter 11).

- XP offers a few useful technologies expressly for laptop owners, including ClearType (for easier-to-read text on flat-panel screens) and improved battery management.

- Frightened Web users can take some comfort in XP's new, built-in *firewall* software, which blocks hacker invasions from the Internet (Chapter 10).

- Windows Messenger lets you exchange instant messages with people on your MSN, Hotmail, or Windows Messenger "buddy list" over the Internet. If your PC has a microphone and speakers, you can also talk to your pals toll-free. Windows Messenger even turns your PC into a videophone, if it has a video camera.

- *Remote Assistance* means that, in times of troubleshooting, you can extend an invitation to someone geekier than yourself to see, and even take control of, your PC from across the Internet. For anyone who's ever lived through the exasperating experience of trying to troubleshoot a friend's computer over the phone ("Now do you see a message on the screen? What does it say? No, no, that's the Recycle Bin…"), this is a big deal.

Professional Edition vs. Home Edition

It's *mostly* true that there's really just one Windows XP. The Professional and Home editions look alike, generally work alike, and are based on the same multigigabyte glob of software code.

But as with a pizza, insurance policy, or Toyota Camry, you can pay a little more for a few extras. Buying the Professional Edition equips you with these goodies. Many of them are interesting primarily to professional corporate network nerds, but all are described in this book:

- **Remote Desktop.** If your XP Pro machine has a permanent Internet connection (like a cable modem or DSL), you can connect to it from any other Windows machine via the Internet (or office network). You can see what's on its screen and manipulate what you find there—a great feature when you're traveling with a laptop.

- **Corporate domain membership.** XP Pro computers can be part of a *domain*—a group of networked computers, usually in big corporations (Chapter 19), that system administrators can maintain as a unit. Computers running the Home Edition can't join a domain and aren't affected by the changes the administrator makes to the domain settings.

- **Administrative shares.** Windows XP Pro creates several *shared folders* for use by administrators and operating system services that manage the computer environment on the network. For security reasons, and to make it impossible for some

clueless worker bee to delete essential files, XP Pro doesn't give everyday employees access to these folders.

- **Remote Installation Service (RIS).** RIS is a technical process that helps administrators install operating systems and software via the network without having to physically visit each computer.

- **Acknowledgment of high-horsepower chips.** If your computer has multiple processors inside, or the Intel Itanium processor, only XP Pro exploits them.

- **Offline files.** This feature lets you "sign out" certain files and folders when you're about to leave the office with your laptop. When you return, the documents you've edited are automatically copied back to their starting places on the network.

- **Roaming profiles.** This feature lets you sit down at any PC on the office network, log on, and see your own personal desktop, even though you're not at your own personal PC.

- **Group and local policy settings.** *Group policies* let administrators set up various groups on the network domain (one for Marketing, one for Accounting, as so on). That way, the administrator can apply the same security and management settings to all employees in that group, in one fell swoop.

  Local group policies let administrators customize and fine-tune the underlings' PCs. For example, the admin can prevent you from using certain programs (like chat programs) and specify what your Start menu and taskbar look like. (If a local group policy conflicts with a network domain group policy, the group policy usually wins.)

- **Polyglot heaven.** You can make Windows XP change the language it uses for dialog boxes, menus, help files, dictionaries, spelling checkers, and so on. Microsoft refers to this feature as the Multilingual User Interface. Over 60 languages are included in both versions of Windows XP, but only XP Pro includes a toolbar (the Language bar) that lets you change the language on your computer at any time.

- **File protection.** In XP Pro, you can protect individual files or folders by encrypting them, so that not even the most diligent spy or hacker can open them.

- **NTFS Permissions.** XP Pro gives you much greater control over who (in your home, school, or office) can access which files, folders, or programs—whether over the network or when logging in directly. Details in Chapter 17.

- **Internet Information Services (IIS).** XP Pro can turn your PC into a Web, mail, and FTP server using this software. (This feature may be familiar to Windows 2000 fans.)

- **Dynamic disks.** If you have more than one hard drive, you can set up XP Pro to treat them all as single massive disk. (Details in Chapter 15.)

The Dark Side of Windows XP

Despite all of the improvements, Windows XP doesn't come without its share of controversy. Let us count the ways in which the new operating system has raised eyebrows and hackles.

Security Holes

Since the first edition of this book—in fact, since Windows XP itself first appeared—the landscape of Windows computing has taken a disconcerting jolt toward the nasty. Almost everyone connected to the Internet has encountered one or more of these upsetting no-fun creations:

- **Viruses.** Online lowlifes write hundreds of new viruses and Trojan horses each year, each designed to gum up the works in Windows for as many people as possible. Viruses are getting more damaging, more frequent, and more expensive to clean out once your PC is infected.

- **Spyware.** This relatively new category of evilware gets downloaded to your hard drive secretly, piggybacking on some more legitimate download. You might think you're downloading a perfectly safe game, but it actually contains a secret program that runs without your knowledge. It may monitor what you type, it may serve as a remote-control tool for hackers, or it may actually send files and information from your PC back to whoever created the spyware.

- **Hacker attacks.** Hackers aren't especially interested in your grocery lists and letters to Congress. Instead, they prefer to use automated sniffing software that looks for unprotected PCs. If they get into yours, they can turn your PC into a relay station that makes it harder for authorities to trace their hacking exploits.

Fortunately, Microsoft has taken a strong step toward shielding you from this kind of unpleasantness by creating Service Pack 2. As you'll find out in Chapter 10, Service Pack 2 makes it much harder for the scum of the Net to unleash viruses, spyware, and hacking attacks on you.

Service Pack 2 is far from perfect, however. In the end, the responsibility for protecting your PC falls on you—and Chapter 10 gives you the information you need to do it.

Activation (Copy Protection)

Windows XP marks the first time Microsoft has ever copy-protected Windows, meaning you can't install Windows XP on more than one PC from the same CD. (Technically, the CDs are all identical. What you really can't use more than once is your serial number.) If you have a desktop PC as well as a laptop, you have to buy Windows XP twice, and Microsoft will give you only a 10 percent discount on the second copy. If you make the attempt, the second PC refuses to operate after 30 days.

How does it know that you're being naughty? When you first install Windows XP, the operating system inspects ten crucial components inside your PC: the hard drive, motherboard, video card, memory, and so on. All this information is transmitted, along with the 25-character serial number on the back of your Windows XP CD (the

Product Key), to Microsoft's database via your Internet account. The process takes about two seconds, and involves little more than clicking an OK button. You have just *activated* Windows XP.

Note: If you don't have an Internet connection, activation is a much more grueling procedure. You have to call a toll-free number, read a 50-digit identification number to the Microsoft agent, and then type a 42-digit confirmation number into your software. Do whatever it takes to avoid having to endure this fingertip-numbing ritual.

Later, if you try to install the same copy of Windows XP onto a different computer, Windows XP will check in with Microsoft and discover that the new machine's components aren't the same. It will conclude that you have tried to install the same copy of the operating system onto a different machine—and it will lock you out.

This aspect of Windows XP has frightened or enraged many a computer fan. In truth, though, it isn't quite as bad as it seems. Here's why:

- If you buy a new PC with Windows XP already installed, you don't have to activate anything; it's already been done.

- Copies of Windows XP that are distributed within corporations don't require this activation business, either.

- No information about *you* is transferred to Microsoft during this activation process—only a list of the components in your PC make the trip. (Later in the installation process, you're also asked to *register* your copy of Windows—a completely different affair. This time, personal information *is* transmitted to Microsoft—but this part is optional.)

- Don't believe the Internet Chicken Littles who claim that activation will shut down your PC if you try to upgrade the memory or another component. In fact, you would have to replace four of the ten key components within a period of four months—your basic hardware-upgrade frenzy—before Windows XP stopped recognizing your computer. And even then, you could just call Microsoft to obtain a new activation number.

Tip: Your PC's note to itself that Windows has been properly activated is stored in two little files called Wpa.dbl and Wpa.bak. (They're in your My Computer→Local Disk (C:)→Windows→System32 folder.) If you ever decide to replace your hard drive, back up these little files before you remove your original drive. (Copy them onto a floppy, for example.)

Then, after installing the new hard drive and installing Windows XP onto it, copy the Wpa.dbl and Wpa.bak files into exactly the same folder. Windows XP will be perfectly content that it's running on a legitimate, properly activated computer.

Privacy Concerns

Microsoft is making more of an effort than ever to compile a massive database of its customers. There's nothing particularly sneaky about it, though, because Microsoft collects this information only with your permission.

Here are three times when you'll be asked to send information back to Microsoft:

- **During registration.** As noted earlier, registration means "sending your name and address to Microsoft just after starting up Windows XP for the first time." Registering ensures that you'll be on Microsoft's mailing lists, so you won't miss a single exciting Microsoft marketing message. Fortunately, it's optional.

- **After a crash or freeze.** When things go really wrong with your software, Windows XP, like Office XP before it, seeks your permission to send a bug report back to the mother ship. No information about you is supposed to go along for the ride—only a description of your PC and some technical specs that describe what was going on at the time of the crash. However, it's technically possible for some scraps of your document to show up in the report.

   Microsoft collects these bug reports by the thousands. Its hope, of course, is that it will be able to spot patterns that help pinpoint the causes of these crashes.

- **When you try to use one of the Internet features.** Some of Windows XP's most attractive features, including MSN Messenger and Web page publishing, require you to have a *Passport*—Microsoft's form of Internet identification. All you have to reveal in this case is your email address. You can refuse, of course, but then Microsoft won't let you use those features.

Microsoft swears up and down that it has no ulterior motives in compiling this data. But if it makes you nervous, just decline in each case.

Microsoft Data Formats

Microsoft makes no secret of the fact that it wants its own software technologies to predominate, especially when it comes to the Internet and multimedia. For example, Windows Media Player can't understand QuickTime movie files or RealAudio files.

The situation has improved slightly over time. For example, the original Windows XP didn't include the Java software required by many Web sites (because Java isn't a Microsoft technology), and Windows Media Player couldn't even create MP3 files. Fortunately, public pressure convinced Microsoft to restore Java in Service Pack 1 (page 179) and MP3-file creation in Media Player 10 (Chapter 7).

Part One:
The Windows XP Desktop

1

The Desktop and Start Menu

W hen you turn on a Windows XP Pro computer for the first time, you may think that you're simply seeing the traditional Windows startup process as redesigned by a West Coast graphic designer. If it's a new computer, you may also receive a big hello from the company that sold it to you.

If you've just performed a *clean installation* of Windows XP (page 641), or if it's a brand-new PC, you may now be treated to a series of blue "Welcome to Microsoft Windows" setup screens. This Setup Wizard guides you through setting up an Internet account, *activating* your copy of Windows (page 16), setting up *accounts* for different people who will be sharing this computer (page 513), and so on. Appendix A has a complete description of this process.

Logging In

What happens next in the startup process depends on which of XP Pro's two "personalities" you're seeing, which is determined by what kind of network you're connected to.

Eager though you may be to dive in, taking a minute to learn the difference is essential if you hope to understand what appears on screen when you log in and why it may not match the examples you see online and in magazines and books.

Domains vs. Workgroups

Unlike Windows XP Home Edition, which was designed primarily for individuals to use, well, at home, Windows XP Pro serves two masters. Although it works very well for home PCs, it's also designed to thrive in massively networked corporations.

HP Inc. - Exhibit 1007 - Page 33

As a result, Windows XP Pro has two distinct personalities, each of which presents different features, a different logon sequence, and different levels of security. What you get when you log in depends on what kind of network your PC is connected to:

- **A domain network** is a group of computers and other network gear that's centrally maintained by an administrator, thanks to a special, master computer called a *domain controller.* That highly paid professional can set up and troubleshoot all files and security settings on all domain PCs without having to visit each one in person.

  You, the employee, can generally sit down at any computer in the domain and log on with your user name and password. At that point, you find the same files, folders, and disks available to you as you did at your own computer. For more information on domains, see Chapter 19.

- **A workgroup** is the kind of network in most homes and small offices: a small cluster of machines connected via network cables or wireless cards, as described in Chapter 18. Instead of enjoying central administration, as in a domain, you have to configure all settings for accounts and shared folders independently on each computer. If you have five PCs, and you'd like to be able to access all of their
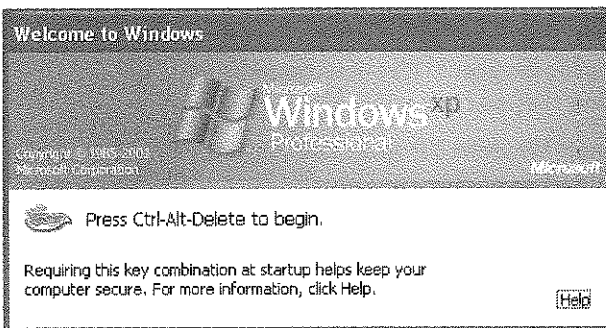
Figure 1-1:
Top: When your computer is a member of a network domain, you're probably greeted by this message when you start up the PC. To proceed, press Ctrl+Alt+Del (a ritual that may be familiar if you've used Windows 2000).

Bottom: This is the Classic Logon dialog box, which appears next. Type your name and password and then click OK or press Enter.
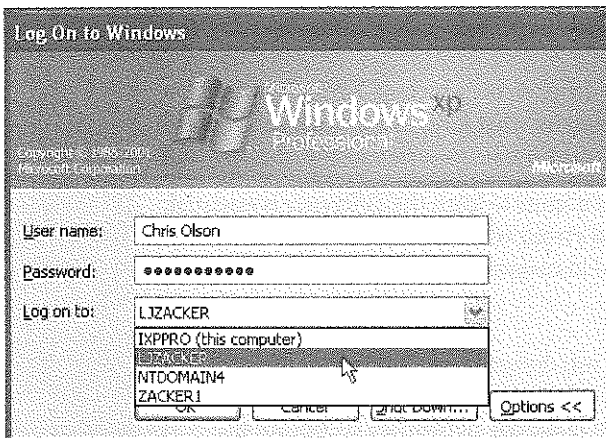
files from across the network, you must set up an account for yourself (a name and password) five times. (Clearly, workgroups get to be a real hassle as they grow larger than about ten machines.)

As you read this book, this is the category you're interested in if your PC is at home, sits in a small office, or isn't part of any network at all.

Tip: If you're not sure whether your computer is a member of a workgroup or a domain, choose Start→ Control Panel→System, and then click the Computer Name tab. This dialog box shows the name of your computer and the name of its domain or workgroup.

Logging In, Continued

Now that you know which XP Pro personality your computer has adopted, you can see why the login process isn't the same for everybody.

• **If your PC connects to a corporate domain,** you encounter the startup box shown in Figure 1-1. Press Ctrl+Alt+Del to proceed to the "Classic" Logon dialog box. Type your name in the User Name text box, type your password in the Password text box, and then click OK (or press Enter). You arrive at the desktop.

• **If your PC is part of a workgroup (or no network at all),** you may encounter the Welcome dialog box shown in Figure 1-2. Click your name in the list, type your password if you're asked for it, and click the little right-pointing arrow button (or press Enter). You arrive at the desktop.

Figure 1-2:
If there are several accounts on a stand-alone or workgroup PC—that is, if more than one person uses it, each with his own account—the machine presents this screen each time you turn it on. See Chapter 17 for much more on this business of user accounts and logging in.
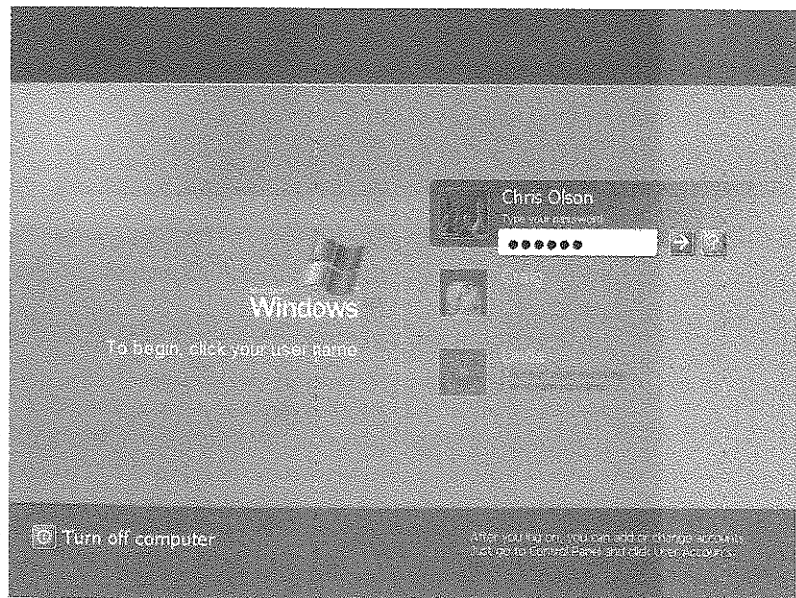
• If it's a standalone PC that nobody else uses, no big deal. You arrive at the Windows XP desktop.

Tip: Rather go straight to the desktop without clicking your name? TweakUI can make it so; see page 662.

The Elements of the XP Desktop

Once you're past the heart-pounding excitement of the new startup logo and the Setup Wizard, you reach the digital vista shown in Figure 1-3. It's the Windows desktop, now graced by a pastoral sunny hillside that should look familiar to anyone who has ever watched "Teletubbies."
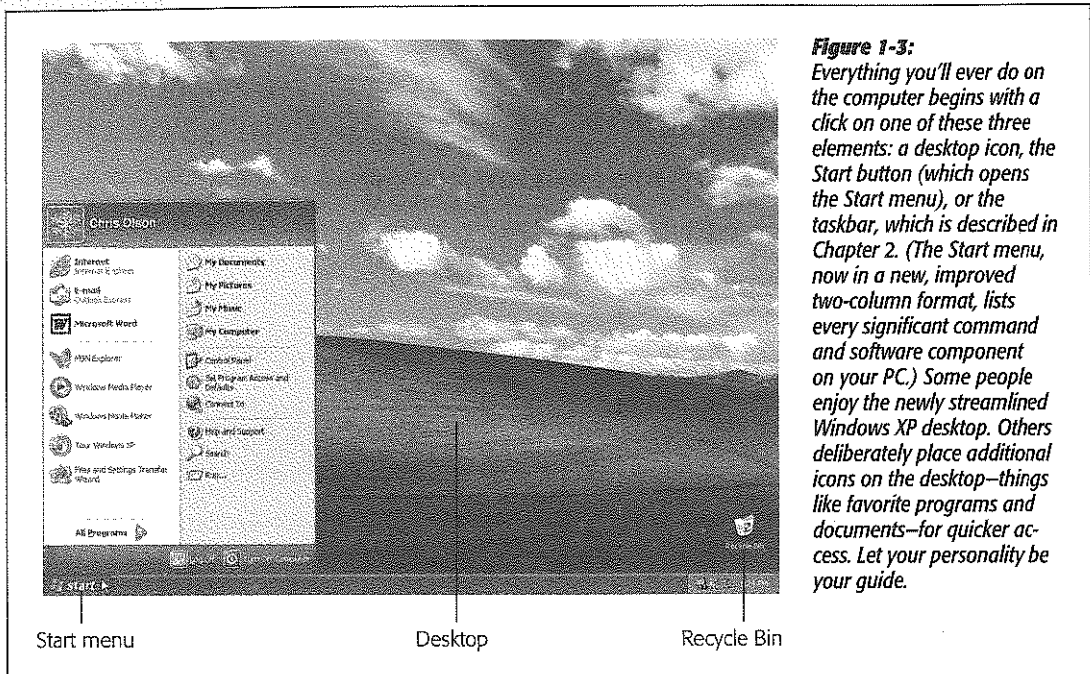
Figure 1-3:
Everything you'll ever do on the computer begins with a click on one of these three elements: a desktop icon, the Start button (which opens the Start menu), or the taskbar, which is described in Chapter 2. (The Start menu, now in a new, improved two-column format, lists every significant command and software component on your PC.) Some people enjoy the newly streamlined Windows XP desktop. Others deliberately place additional icons on the desktop—things like favorite programs and documents—for quicker access. Let your personality be your guide.

Start menu   Desktop   Recycle Bin

On a fresh installation of Windows XP, you may be surprised to discover that Microsoft has gone cleanliness-crazy. A new installation of Windows XP on a new computer presents an absolutely spotless desktop, utterly icon-free except for the Recycle Bin. Even the familiar My Computer, My Documents, and My Network Places icons seem to be missing. (If you've upgraded from an older version of Windows, you'll still see your old icons on the desktop. Furthermore, the company who sold you your PC may have stocked the desktop with a few of its own icons—but you get the point.)

Those former desktop icons are now in your Start menu, which appear when you click the Start button in the lower-left corner of your screen (Figure 1-3). The following pages cover the Start menu in detail.

The Start Menu

Windows XP is composed of 40 million lines of computer code, scattered across your hard drive in thousands of files. The vast majority of them are support files, there for behind-the-scenes use by Windows and your applications. They're not for you. They may as well bear a sticker saying, "No user serviceable parts inside."

That's why the Start menu is so important. It lists every *useful* piece of software on your computer, including commands, programs, and files. You can use the Start menu to open your applications, install new software, configure hardware, get help, find files, and much more.

When you click the Start button at the lower-left corner of your screen, the Start menu pops open, shooting upward. Its contents depend on which options you (or your computer's manufacturer) have put there; Figure 1-4 illustrates an example. The new, multi-column structure of the Start menu is one of the most radical developments in Windows XP.

The new Start menu is divided into four chunks. One area, the *pinned items list,* lists programs you use every day and is yours to modify. Another, the *most frequently used programs list,* lists programs you use often and is computed automatically by Windows. The final two sections list Windows features and standard Windows programs. Figure 1-4 describes the function of each section.

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Restoring the Desktop Icons

The desktop icons that once provided quick access to important locations on your PC—My Computer, My Documents, My Network Places, and Internet Explorer—have been swept away by the digital broom of Microsoft's clean-freak XP designers.

You can still get to these locations; they're listed in your Start menu now. On one hand, having them in the Start menu means that you can open these folders and programs without having to hide whatever windows are covering up your desktop. On the other hand, opening them now requires two mouse clicks (including one to open the Start menu)—an egregious expenditure of caloric effort.

If you miss the old arrangement, it's easy enough to put these icons back on the desktop. To do so, right-click the desktop and then choose Properties from the shortcut menu.

Now the Display Properties dialog box appears. Click the Desktop tab. Below the list of backgrounds, click the Customize Desktop button. As shown here, awaiting your summons are checkboxes for the usual desktop icons: My Documents, My Computer, My Network Places, and Internet Explorer. Turn on the ones you'd like to install onto the desktop, putting check marks in the appropriate boxes, and then click OK twice. Your old favorite icons are now back where they once belonged.

Tip: If you're a keyboard-shortcut lover, you can open the Start menu by pressing the Windows logo key, if your keyboard has one. (If you're using one of those antique, kerosene-operated keyboards that lacks a Windows key, press Ctrl+Esc instead.)

Once it's open, you can use the arrow keys to "walk" up and down the menu (or type the first letters of the command you want), and then press Enter to "click" the highlighted command.

Start menu items graced by a right-pointing triangle arrow (such as Accessories in Figure 1-4) have *submenus,* also known as *cascading menus.* As you move your mouse pointer over an item that has such an arrow, the submenu, listing additional options, pops out to the right (you don't have to click). It's not unusual for submenu items to have arrows of their own, indicating—what else?—additional submenus.

This discussion describes the items in the Start menu from the bottom up, left to right, the way your mouse encounters them as it moves up from the Start button.

Tip: To change your name and icon as it appears at the top of the new Start menu, use the User Accounts program in the Control Panel, as described on page 299.

"Pinned" items   Components of Windows

Most often used items

Master list of programs
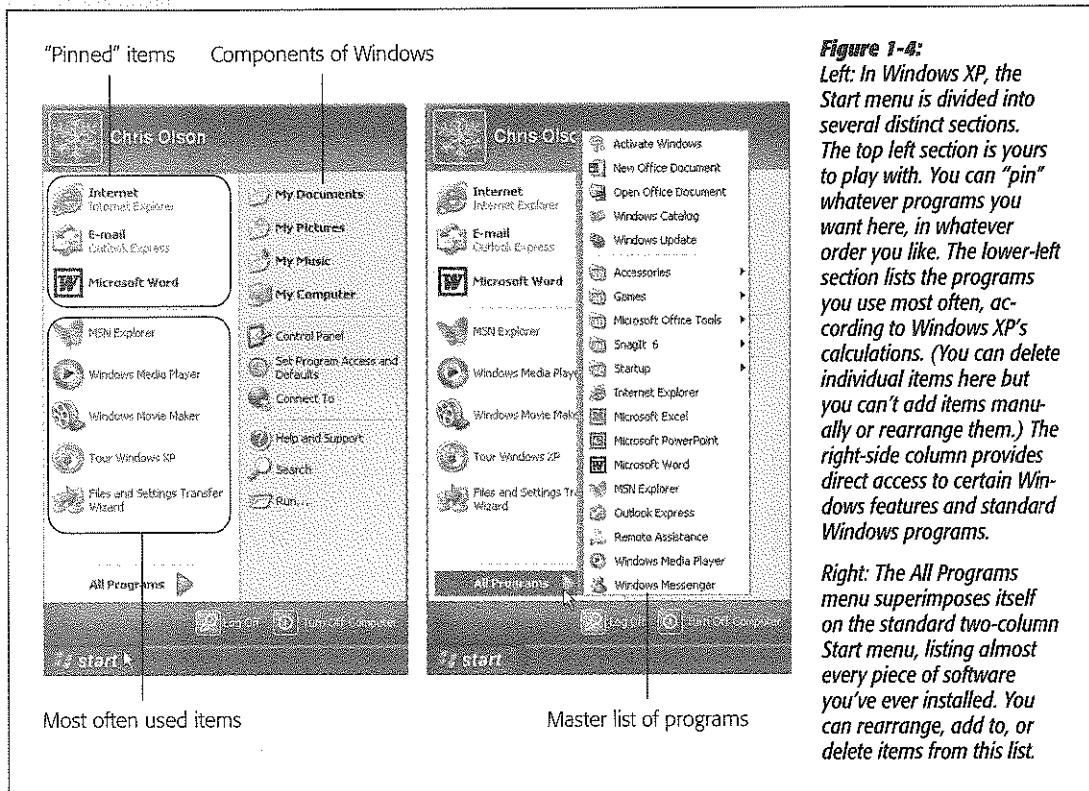
Figure 1-4:
Left: In Windows XP, the Start menu is divided into several distinct sections. The top left section is yours to play with. You can "pin" whatever programs you want here, in whatever order you like. The lower-left section lists the programs you use most often, according to Windows XP's calculations. (You can delete individual items here but you can't add items manually or rearrange them.) The right-side column provides direct access to certain Windows features and standard Windows programs.

Right: The All Programs menu superimposes itself on the standard two-column Start menu, listing almost every piece of software you've ever installed. You can rearrange, add to, or delete items from this list.

Start→Log Off

This command is at the heart of Windows XP's *accounts* feature, in which each person who uses this PC gets to see his own desktop picture, email account, files, and so on (see Chapter 17). When you're logged into a network domain this is one of the most important features of all. You should log off your computer any time you walk away from it, especially if your computer stores confidential information. If this is a home computer and it doesn't store confidential information you can safely ignore this option forever.

Choosing this command may present either of two dialog boxes, depending on whether your computer is logged into a network domain, or whether or not you log on to a standalone or workgroup computer that has the Windows XP feature called *Fast User Switching* turned on.

Note: You cannot use Fast User Switching on a computer that logs on to a network domain.

- **Immediate log off.** If you see the dialog box shown at bottom in Figure 1-5, two possibilities exist. The first is that you're logged into a network domain. When

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Return to the Old Start Menu

The newly designed XP Start menu has its charms, not the least of which is its three-dimensional glowing effect. But it's also confusing to old-time Windows users and slower to open, particularly on PCs that aren't quite state of the art.

Fortunately, it's easy enough to switch back to the organization and design of the old, single-column Start menu. Just right-click the Start button. Now, from the shortcut menu, choose Properties.

In the Taskbar and Start Menu Properties dialog box that appears, you'll see the option to return to the old Start menu design—what Microsoft calls Classic Start menu—staring you in the face, complete with an illustration. Click that button, click OK, and enjoy going back to the future.

When you use the Classic Start menu, you'll notice a few differences in the behavior of the Start menu commands. For example, the Log Off command bears your actual account name ("Log Off Chris"), and of course the Programs command isn't a second, separate menu superimposed on the Start menu. (But you knew that, of course, because you're already accustomed to the older Start menu.)

Incidentally, on the assumption that you *really* liked Windows better the old way, turning on the Classic Start menu also restores several icons to your immaculate desktop: My Documents, My Computer, Internet Explorer, and My Network Places. (They disappear when you switch back to the modern Start menu.)
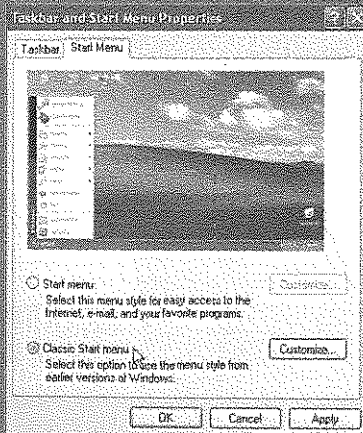
To restore the new Start menu, repeat the procedure—but this time, in the dialog box shown here, turn on Start Menu instead.

HP Inc. - Exhibit 1007 - Page 39

you click Log Off (or press Enter), Windows closes all open programs and then presents the classic Welcome to Windows dialog box so that the next person can log on.

The second possibility is that, on your standalone or workgroup computer, you or someone with local Administrator privileges on your computer has turned off Fast User Switching. If you click Log Off (or press Enter), Windows closes all open programs and presents a new Welcome screen (Figure 1-2) so that the next person can sign in. If you haven't saved your work, each application gives you an opportunity to do so before closing.

If you click Cancel in either case, you're sent right back to whatever you were doing.

• **Switch User/Log Off.** If you see the dialog box shown at the top of Figure 1-5, then Fast User Switching is turned on (as it is on any fresh Windows XP Pro installation for a standalone or workgroup computer). It's among the most useful new features

Figure 1-5:
Top: On workgroup computers, if Fast User Switching is turned on, this is what you see when you choose Start→ Log Off. No matter which button you click, you return to the Welcome screen. The only difference is that clicking the Switch User button leaves all of your programs open and in memory, and the Log Off button takes a few moments to close them.

Bottom: On domain-network computers (or any computer where Fast User Switching is turned off), a dialog box like this appears when you choose Start→Log Off. If you click the Log Off button, Windows quits your programs and then takes you to the Classic Logon dialog box.
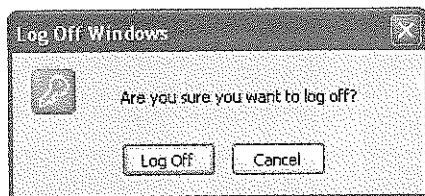
FREQUENTLY ASKED QUESTION

Turn Off Computer in the Start Menu

Could someone explain why the Turn Off Computer command is in a menu called Start?

The Name-the-Button committee at Microsoft probably thought that you'd interpret Start to mean, "Start here to get something accomplished."

But you wouldn't be the first person to find it illogical to click Start when you want to stop. Microsoft probably should have named the button "Menu," saving all of us a lot of confusion.

WINDOWS XP PRO: THE MISSING MANUAL

HP Inc. - Exhibit 1007 - Page 40

in Windows XP, since it lets somebody else log into the computer, opening up his own world of documents, email, desktop picture, and so on. Meanwhile, whatever *you* had up and running remains open behind the scenes. After the interloper is finished, you can log on again to find all of your open programs and documents exactly as you left them on the screen.

Although this is a handy Windows XP feature, it can also be the least secure. When user accounts aren't assigned passwords, anyone can access anyone else's information as easily as clicking the person's name.

Tip: On your Windows XP Professional standalone or workgroup computer, you turn Fast User Switching off in Start→Control Panel→User Accounts. Click the link called "Change the way users log on or off."

Figure 1-6:
Just how off is off?

Top: Here's what you probably see if you work in a company with a domain network. Click the command in the drop-down menu that corresponds to the degree of down-ness you want—Log Off, Shut Down, Restart, Standby, Hibernate, or Disconnect. Or type the first letter of the command you want. (For Standby, press S twice.)

Bottom: On a workgroup PC, your Shut Down dialog box may look like this instead. As you see here, the secret Hibernate button appears only when you press the Shift key.

HP Inc. - Exhibit 1007 - Page 41
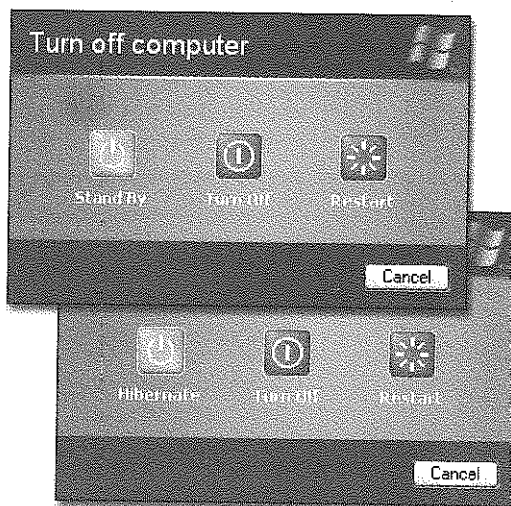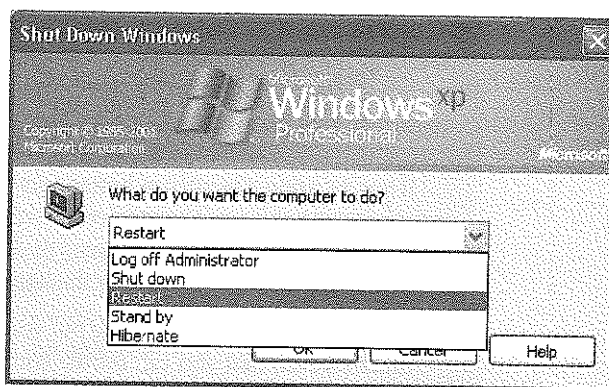
Start→Shut Down (Turn Off Computer)

In Windows XP Pro, this menu item is more powerful than its name implies. Choosing it opens a dialog box that offers several variations on "shut down" (see Figure 2-6).

- **Standby** puts your computer to "sleep." This special state of PC consciousness reduces the amount of electricity the computer uses. It remains in suspended animation until you use the mouse or keyboard to begin working again. (This feature is available only if your computer offers it *and* you've turned it on in the Power Options program in the Control Panel.)

  How the PC sleeps depends on its power-saving features. Usually, the hard drive stops spinning and the screen goes dark. Whatever programs or documents you were working on remain in memory.

Warning: This information is stored only in memory, not on your hard drive. If your computer loses power, you lose all of the information that was stored in memory. To be absolutely safe, save your open documents before putting the PC in Standby.

  If you're using a laptop on battery power, Standby is a real boon. When the flight attendant hands over your microwaved chicken teriyaki, you can take a food break without closing all your programs or shutting down the computer. And best of all, Standby mode consumes only the barest trickle of battery power.

  Use Standby when you want to put your computer to sleep on cue. It's worth noting, however, that you can set the computer to stand by automatically whenever you haven't used the mouse or keyboard for a while. You can even make it so that the computer won't wake up again unless you type in a certain password. Page 286 has the details on these extra features.

- **Shut down** quits all open programs (or, in some cases, prompts you to do so), offers you the opportunity to save any unsaved documents, and then exits Windows. Most modern PCs then turn off automatically.

Note: If you're logged on to a workgroup network, this command may be called Turn Off.

  If your older model requires you to manually press the Power button, you must wait until a message appears on the screen telling you that it's safe to turn off the computer (which may take more than a few seconds).

Tip: You don't have to open the Start menu to turn off the computer. Just press the power button. (If that makes the PC sleep or *hibernate* instead, see page 284.)

- **Restart** quits all open programs, then quits and restarts Windows again automatically. The computer doesn't turn off. (You might do this to "refresh" your computer when you notice that it's responding sluggishly, for example.)

- **Log off** quits all programs, disconnects from the network, and then displays the Welcome screen so that the next person can log in. (The PC doesn't restart.)

- **Disconnect** appears as an option only if your computer is connected to a Windows 2000 Server machine that's running Terminal Services. (If you use this feature, you know who you are.) When you choose it, your terminal session disconnects, but the server remembers what you were doing. When you reconnect to Terminal Services, you return to your previous session. Everything looks as it did before you disconnected.

- **Hibernate** shuts down the machine after it *memorizes* the state of your software, including all open operating system files, applications, and documents. Behind the scenes, it saves all this memorized information into a file on your hard disk. As a result, the Hibernate command doesn't work unless you have a lot of free disk space. The more RAM your computer has, the more disk space you'll need. (As with Standby, this feature is only available if your computer offers it and you've turned it on in the Power Options Control Panel program.)

Note: On a workgroup computer, you may not see the Hibernate command. It doesn't appear in the Turn Off Computer dialog box unless you hold down the Shift key. When you do, the Standby option changes to say Hibernate (see Figure 1-6).

The beauty of this feature is that when you start the computer again, everything returns to the way it was when you shut down—*fast.* The same documents appear, the same programs are running, and so on. Hibernate, in other words, offers the speed and convenience of Standby, with the safety of Turn Off.

GEM IN THE ROUGH

Hibernation as a Shutdown Technique

When you shut down the computer in Hibernation mode, the next startup is impressively fast. As soon as the startup procedure begins, Windows notices the hibernation file on the hard drive, says, "Hey, everything's in place," and loads the file into memory. After you push the power button, everything reappears on the screen faster than you can say, "Redmond, Washington." After you've enjoyed the speed of a power-up from Hibernation mode, the normal startup seems unbearably slow.

This instant-on characteristic makes it tempting to use the hibernation feature *every* time you shut down your computer. But when your PC hibernates, Windows doesn't have a chance to quit and then restart, as it would if you use the Restart command or shut the computer down. As a result, Windows never gets the opportunity to flush your computer's memory or perform the other domestic chores of a modern operating system. Consequently, Windows may seem to slow down over time.

Furthermore, the Plug and Play feature described in Chapter 14 might not work when you plug in some new piece of equipment. That's because Windows ordinarily recognizes such new arrivals during the startup process—and when your computer hibernates, there *is* no startup process.

The solution is to compromise. Use the Hibernate mode *most* of the time, but shut the computer down or restart it every now and then. (If you bought your PC with Windows XP Pro preinstalled, you may have noticed that it starts up faster than before, anyway.)

As with the Standby feature, you can configure your computer to hibernate automatically after a period of inactivity, or require a password to bring it out of hibernation. See page 284 for details.

Note: Some older computers don't come with the necessary circuitry (technically, *BIOS support*) for the Hibernate command. In that case, the Hibernate choice doesn't appear, even when you press Shift.

Start→All Programs

For most people, the Start→All Programs command is the most important function of the Start menu. It's the master list of every program on your computer. (The installer for any new program generally installs its own name in this menu; see Figure 1-7.) You can jump directly to your word processor, calendar, or favorite game, for example, just by choosing its name from the Start→All Programs menu.

Tip: When the Start menu is open, you can open the All Programs menu in a number of ways: by clicking the All Programs menu, by pointing to it and keeping the mouse still for a moment, or by pressing the P and then the right-arrow keys on your keyboard.

Speaking of keyboard fanaticism: Once the programs list is open, you can also choose anything in it without involving the mouse. Just type the first letter of a program's name—or press the up and down arrow keys—to highlight the name of the program you want. Then press Enter to seal the deal.

Clearly, the graphic designers were on vacation the day Microsoft came up with this one. The All Programs menu appears *superimposed* on the regular Start menu, adding a third column in a second layer—not the most elegant visual solution, to be sure, but at least easy to find.

The Startup folder

The Start→All Programs menu also lists the *Startup folder,* which contains programs that load automatically every time you start Windows XP. This can be a very useful feature; if you check your email every morning, you may as well save yourself a few

NOSTALGIA CORNER

Restoring the Single-Column Programs List

If you have a lot of programs, the All Programs menu may itself consume multiple columns on your screen. If this columns-on-columns effect makes you a bit dizzy, just replace it with the simple, one-column, scrolling Programs menu of Windows gone by.

To do so, right-click the Start button, then choose Properties from the submenu. Next, click the Customize button, click the Advanced tab, and scroll down the list of options until

you see Scroll Programs. Turn on the checkbox and then click OK twice.

Now your programs list may still be too tall for the screen. But you can scroll the list by pointing to the tiny black triangle arrow (at the top or bottom of the menu) without clicking. And of course, you can always select items in the list from the keyboard.

mouse clicks by putting your email program into the Startup folder. If you spend all day long word processing, you may as well put Microsoft Word or WordPerfect in there.

In fact, although few PC users suspect it, what you put into the Startup folder doesn't have to be an application. It can just as well be a certain document you consult every day. It can even be a folder or disk icon whose window you'd like to find open and waiting each time you turn on the PC. (The My Documents folder is a natural example.)

Figure 1-7:
The Start→All Programs menu may list the actual application (such as Microsoft Word) that you can click to launch the program. But it may also list a program group, a submenu that lists everything in a particular application folder. Some software programs install a folder on the All Programs menu, like the Office Tools folder shown here, that contains commands for launching the software, uninstalling the software, running specific utilities, opening the help files, and so on.
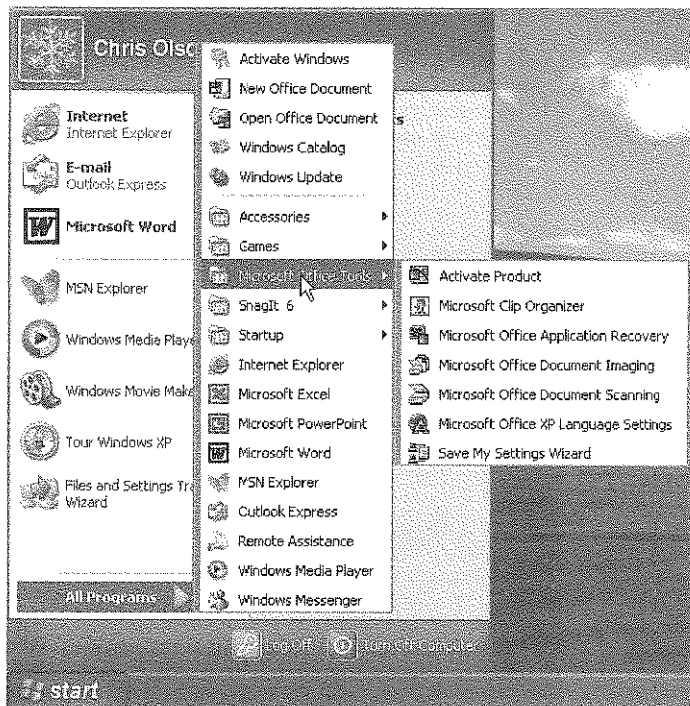
Of course, you may be interested in the Startup folder for a different reason: to *stop* some program from launching itself. This is a particularly common syndrome if somebody else set up your PC. Some program seems to launch itself, unbidden, every time you turn the machine on.

Tip: All kinds of programs dump components into this folder. Over time, they can begin to slow down your computer. If you're having trouble determining the purpose of one startup program or another, visit this Web page, which provides a comprehensive list of every startup software nugget known, with instructions for turning off each one: *http://www.sysinfo.org/startupinfo.html.*

Fortunately, it's easy to either add or remove items from the Startup folder:

1. **Click the Start button. Point to All Programs. Right-click Startup and choose Open from the shortcut menu.**

   The Startup window opens, revealing whatever is inside.

   To delete an icon from this folder, just right-click it, choose Delete from the shortcut menu, and answer Yes to send the icon to the Recycle Bin. Close all the windows you've opened and enjoy your newfound freedom from self-launching software. The deed is done.

   To add a new icon to the Startup folder, on the other hand, read on.

2. **Navigate to the disk, folder, application, or document icon you want to add to the Startup folder.**

   Doing so requires familiarity with one of two folder-navigation schemes: My Computer or Windows Explorer. Both are described in the next chapter.

3. **Using the right mouse button, drag the icon directly into the Startup window, as shown in Figure 1-8.**

   When you release the button, a shortcut menu appears.

4. **Choose Create Shortcuts Here from the shortcut menu.**

   Close all the windows you've opened. From now on, each time you turn on or restart your computer, the program, file, disk, or folder you dragged will open by itself.
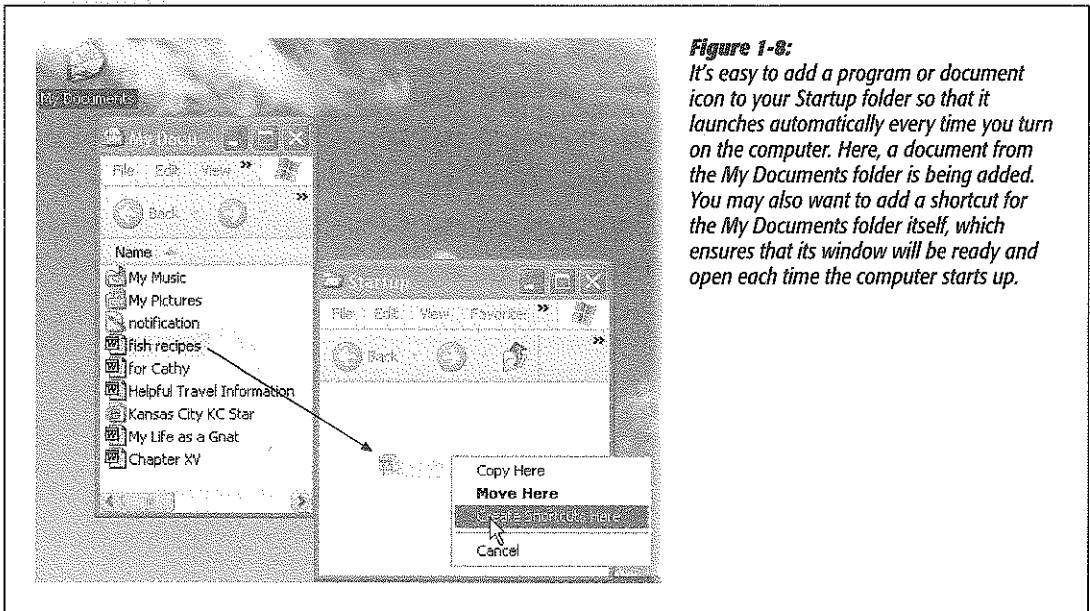
Figure 1-8:
It's easy to add a program or document icon to your Startup folder so that it launches automatically every time you turn on the computer. Here, a document from the My Documents folder is being added. You may also want to add a shortcut for the My Documents folder itself, which ensures that its window will be ready and open each time the computer starts up.

Tip: To find out what something is—something in your Start menu, All Programs menu, or indeed anywhere on your desktop—point to it with your cursor without clicking. A small yellow tooltip appears, containing a text description. (If the tooltip doesn't appear, it might be that the window you're pointing to isn't the *active* window on your desktop. Click the window and then try again.)

Start→Run

Use the Run menu item to get to a *command line*, as shown in Figure 1-9. A command line is a text-based method of performing a task. You type a command, click OK, and something happens as a result.

Working at the command line is becoming a lost art in the world of Windows, because most people prefer to issue commands by choosing from menus using the mouse. However, some old-timers still love the command line, and even mouse-lovers encounter situations where a typed command is the *only* way to do something.

Figure 1-9:
Top: The last Run command you entered appears automatically in the Open text box. You can use the drop-down list to see a list of commands you've previously entered.

Bottom: The Run command knows the names of all of your folders and also remembers the last few commands you typed here. As you go, you're shown the best match for the characters you're typing. When the name of the folder you're trying to open appears in the list, click it to save having to type the rest of the entry.
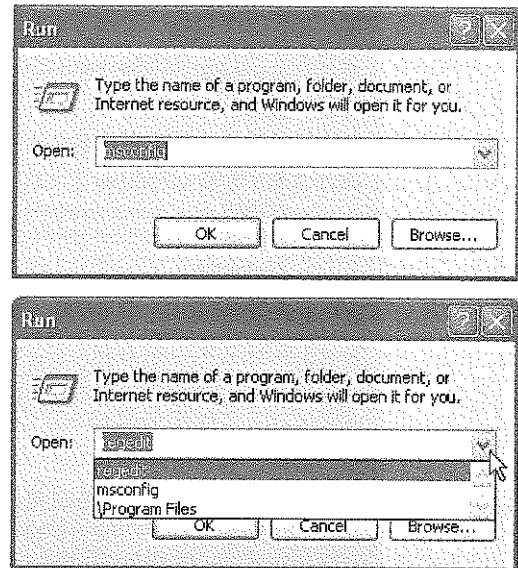
If you're an old-time PC veteran, your head probably teems with neat Run commands you've picked up over the years. If you're new to this idea, however, the following are a few of the useful and timesaving functions you can perform with the Run dialog box.

Launch a Program

As noted later in this discussion, one of the most important Start menu commands is the All Programs menu, where you'll find the name of almost every application on your computer. You can open any of these programs one at a time by typing its *program file name* in the Open text box and then pressing Enter. That's an extremely useful shortcut for both pros and novices alike, because it's frequently faster to launch a program this way than to use the Start→All Programs menu.

Unfortunately, the program file name isn't the same as its plain-English name; it's a cryptic, abbreviated version. For example, if you want to open Microsoft Word, you must type *winword*. That's the actual name of the Word program icon as it sits in your My Computer→Local Disk (C:)→Program Files→Microsoft Office→Office folder. Some other common program-file names are shown here:

Program's real name	Program's familiar name
iexplore	Internet Explorer
explorer	Windows Explorer
write	WordPad
msworks	Microsoft Works
msimn	Outlook Express
wmplayer	Windows Media Player
palm	Palm Desktop
sol	Solitaire
winmine	Minesweep
control	classic Control Panel
regedit	The Registry Editor
cleanmgr	Disk Cleanup
defrag	Disk Defragmenter
calc	Calculator

Tip: To discover the program file name of a favorite program, see "Which One's the Program?" on page 67.

If, like efficiency freaks worldwide, you believe that it's generally faster and more efficient to do something using the keyboard than using the mouse, get this: You can perform this entire application-launching stunt without using the mouse at all. Just follow these steps in rapid succession:

1. **Press the Windows logo key, if you have one.**

   It's usually on the top or bottom row of the keyboard; it opens the Start menu.

2. **Press the letter R key.**

   That's the underlined letter for the Run command, whose dialog box now opens.

3. **Type the program file's name in the Open box.**

If you've typed the name before, just type a couple of letters; Windows XP fills in the rest of the name automatically.

4. **Press Enter.**

Windows opens the requested program instantly. Keystrokes: 4, Mouse: 0.

Launch Any Program or Document

Using the Run dialog box is handy for launching favorite applications, because it requires so few keystrokes. But you can also use the Run dialog box to open *any* file on the computer—if you're willing to do some additional typing.

The trick here is to type in the entire *path* of the program or document you want. (See the box below if you're new to the idea of file paths.) For example, to open the family budget spreadsheet that's in Harold's My Documents folder, you might type *C:\Documents and Settings\Harold\My Documents\familybudget.xls.*

(Of course, you probably wouldn't *actually* have to type all that, since the auto-complete feature attempts to complete each folder name as you start to type it.)

Tip: Typing the path in this way is also useful for launching applications that don't appear in the Start→All Programs menu. (If a program doesn't appear there, you must type its entire pathname—or click Browse to hunt for its icon yourself.)

For example, some advanced Windows XP utilities (including the *Registry Editor,* an advanced diagnostic program) are accessible only through the command line. You also need to use the Run command to open some older DOS programs that don't come with a listing in the All Programs menu.

Open a Drive Window

When you click My Computer on your Start menu, you'll see that Windows assigns a letter of the alphabet to each disk drive attached to your machine—the hard drive, CD-ROM drive, floppy drive, and so on. The floppy drive is A:, the hard drive is usually C:, and so on. (There hasn't been a B: drive since the demise of the two-floppy computer.)

UP TO SPEED

The Path to Enlightenment about Paths

Windows is too busy to think of a particular file as "that family album program in the Program Files folder, which is in the My Programs folder on the C: drive." Instead, it uses shorthand to specify each icon's location on your hard drive—a series of disk and folder names separated by backslashes, like this: *C:\program files\pbsoftware\ beekeeperpro.exe.* This kind of location code is that icon's *path.* (Capitalization doesn't matter, even though you may

see capital letters in Microsoft's examples.)

You'll encounter file paths when using several important Windows features. The Run dialog box described in this section is one; the Search command is another. As you'll see in the next chapter, when you choose the Search command, Windows identifies the location of each file it finds for you by displaying its path.

By typing a drive letter followed by a colon (for example, C:) into the Run box and pressing Enter, you make a window pop open, displaying the contents of that drive.

Open a Folder Window

You can also use the Run dialog box to open the window for any folder on your machine. To do so, type a backslash followed by the name of a folder (see Figure 2-9, bottom). You might type, for example, \Program Files to see your complete software collection.

Note: The Run command assumes that you're opening a folder on Drive C. If you want to open a folder on a different drive, add the drive letter and a colon before the name of the folder (for example, *D:\data*).

If you're on a network, you can even open a folder that's sitting on another computer on the network. To do so, type two backslashes, the computer's name, and then the shared folder's name. For instance, to access a shared folder called Budgets on a computer named Admin, enter \\admin\budgets. (See Chapter 20 for more on sharing folders over the network.)

It might make you feel extra proficient to know that you've just used the *Universal Naming Convention,* or UNC, for the shared folder. The UNC is simply the two-backslash, computer name\folder name format (for example: *ComputerName \foldername*).

Tip: In any of these cases, if you don't remember the precise name of a file or folder you want to open in the Run dialog box, click the Browse button to display the Browse dialog box, as shown in Figure 1-10.
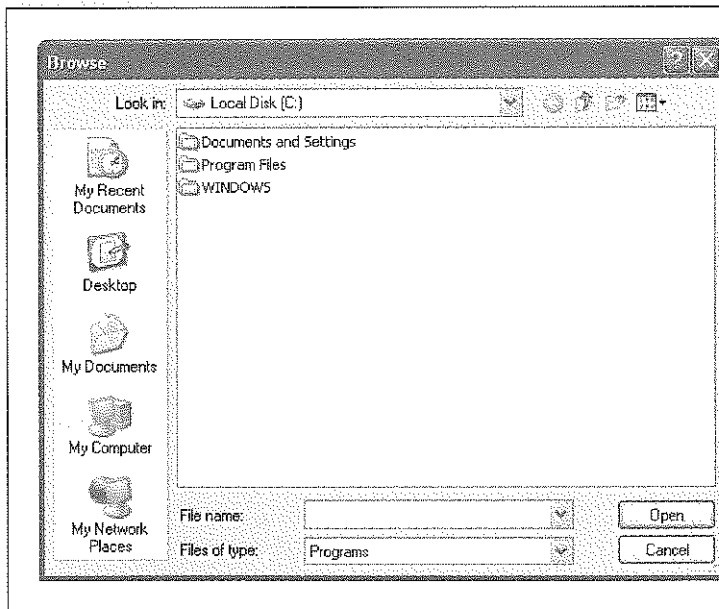
Figure 1-10:
The Browse dialog box, which makes frequent appearances in Windows XP, lets you navigate the folders on your computer to find a file. The five icons at the left side make it easy to jump to the places where you're most likely to find the document you want. If you enter a drive letter and a colon in the Run dialog box before clicking the Browse button (like C:), the Browse dialog box opens with a display of that drive's contents.

Supertip: You can customize this list of folders, so that the ones you use most often show up here, too. All you need is TweakUI, described on page 644.

Connect to a Web Page

You can jump directly to a specific Web page by typing its Web address (URL)—such as *www.realbigcompany.com*—into the Run dialog box, and then pressing Enter. You don't even have to open your Web browser first.

Once again, you may not have to type very much; the drop-down list in the Run dialog box lists every URL you've previously entered. Simply click one (or press the down arrow to highlight the one you want, and then press Enter) to go to that site.

Start→Search

The humble Search command looks no more special than anything else on the Start menu. In Windows XP, however, it's a newly revised powerhouse that's far more complex to navigate. Microsoft has even given it a new name—Search Companion. You'll probably use it often.

The Search function can quickly find all kinds of computer-ish things: file and folder icons, computers on your network, Web sites, email addresses, and phone numbers.

Finding Files and Folders

If you save your files exclusively into the My Documents folder (page 56), you'll have little need to use the Search function to locate your files. You'll always know where they are: right there in that folder.

Every now and then, however, you won't remember where you filed something, or you'll download something from the Internet and not be able to find it again, or you'll

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NOSTALGIA CORNER

Who Let the Dog Out?

Microsoft is at it again, adding cutesy cartoon characters to its software. Fortunately, the Search program works just as well without the dog as with it.

If you'd just as soon not have little Rover eyeing you with his little anthropomorphic 3-D eyes while you do your searching, it's easy enough to get rid of him. Either click "Turn off animated character" on the current menu, or click directly on the animated character to open up the panel illustrated here.

Click "Turn off the animated character" to get rid of the dog. (You must still sit through one final animation while it saunters away.)

> **You rang?**
> What would you like to do?
> - Choose a different animated character
> - Turn off the animated character
> - Do a trick
>
> Back

On the other hand, if this kind of thing seems to make computers less intimidating for you, click "Choose a different animated character" instead. You'll find that Microsoft has provided not just one, but several provocative little characters that can occupy the bottom of your Search panel—a wizard, some yuppie woman in a flying car, and a surfboard kid whose face appears to be made of a banana. Click Next until you see the one you want, and then click OK.

Finally, if you do decide to tolerate Microsoft's animation attempts, don't miss the "Do a trick" link that appears when you click the animated character.

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install something and not know where to look for it. In those situations, the Search command is just what you need (Figure 1-11). It lets you look for a particular file or folder based on its description—by its name, size, date stamp, and so on.

The Search command can also look for the words *inside* your files. That's a powerful feature if you remember having typed or read something, but can't remember what you named the file.

Starting a search

Microsoft wanted to make absolutely sure you'd be able to find the Search command. It has provided at least seven different ways to begin a search:

- Choose Start→Search.

- Press F3 or Windows key+F (that's the Windows logo key on the bottom or top row of most keyboards).

- If a disk or folder window is already open, press Ctrl+E, click the Search toolbar button, or choose View→Explorer Bar→Search.

In each case, the Search window appears, as shown in Figure 1-11.
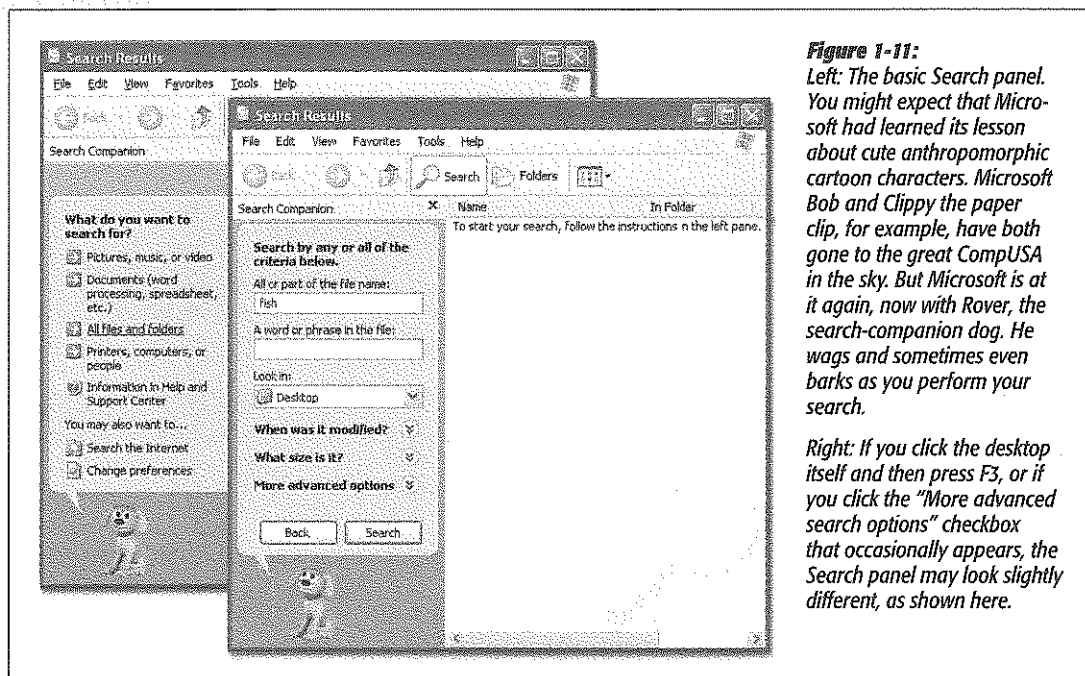
Figure 1-11:
Left: The basic Search panel. You might expect that Microsoft had learned its lesson about cute anthropomorphic cartoon characters. Microsoft Bob and Clippy the paper clip, for example, have both gone to the great CompUSA in the sky. But Microsoft is at it again, now with Rover, the search-companion dog. He wags and sometimes even barks as you perform your search.

Right: If you click the desktop itself and then press F3, or if you click the "More advanced search options" checkbox that occasionally appears, the Search panel may look slightly different, as shown here.

Windows XP comes with a set of canned searches (listed at left in Figure 1-11) designed to help you find what you're looking for faster. Click the green arrow next to the one you want (or click the *words* next to the arrow).

HP Inc. - Exhibit 1007 - Page 52

Pictures, music, or video

When you click this link, the Search panel changes (Figure 1-12, left). Turn on the checkboxes you want, and type in part of the file name.

Tip: As a bonus, this kind of search can also find text inside the *metadata* stored with each multimedia file—the behind-the-scenes descriptive information like pixel dimensions (for photos), and rock group name or music genre (for music files). You can type, for example, *Beatles* into the "All or part of the file name" text box to turn up MP3 files recorded by that band, or *800 x 600* into the text box to find JPEG files of precisely that size.

Figure 1-12:
Left: This panel appears to help you search for multimedia files. Middle: You're all set to search for documents that you've created or downloaded.

Right: This kind of search is slower, but more complete—it searches for everything, including program files and Windows system files. (It doesn't, however, search for metadata in picture, movie, and music files, as does the first kind of search.)
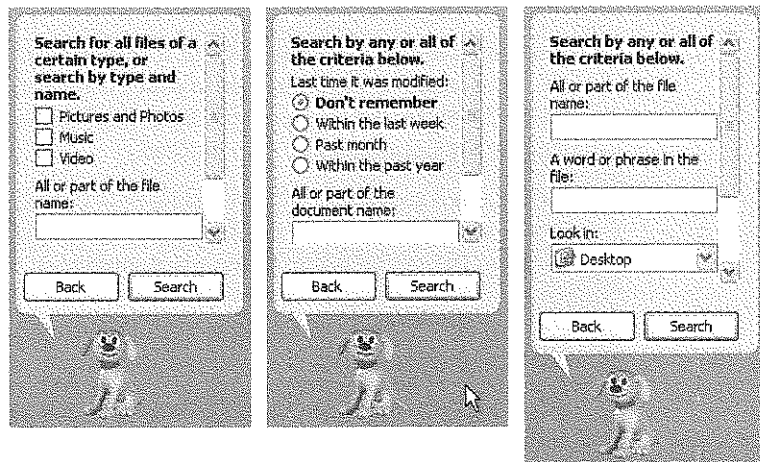
Documents (word processing, spreadsheet, and so on.)

This link produces the panel shown second from left in Figure 1-12. It comes set to search only for documents—files that *you* can create or download. In other words, it doesn't bother looking through hidden files, system files, application files, and so on. And it doesn't find the names of folders at all—just files.

All files and folders

Clicking this link produces the panel shown at right in Figure 1-12. This is the slowest kind of search, because it searches the thousands of hidden in-system files as well as the ones that you've created yourself.

This kind of search offers a number of useful power features:

- **A word or phrase in the file.** Sooner or later, it happens to everyone: A file's name doesn't match what's inside it. Maybe a marauding toddler pressed the keys, inadvertently renaming your doctoral thesis "xggrjpO#$5%////." Maybe, in a Saturday afternoon organizing binge, your spouse helpfully changed the name of your "ATM Instructions" document to "Cash Machine Info," without realizing that it was a

help file for Adobe Type Manager. Or maybe you just can't remember what you called something.

The "A word or phrase in the file" option searches for words *inside* your files, regardless of their names. It's extremely slow, since Windows has to read every single file, which it does only slightly faster than you could. (But there's a workaround—see page 50.) Furthermore, this kind of search works only if you can remember an *exact* word or phrase in the missing document. Even punctuation has to match exactly.

Finally, the text you enter should be unique enough to assume it only exists in the file you're looking for; if you search for, say, *Microsoft,* Windows will find so many files that the search will be pointless.

- **Look in.** Use this drop-down menu if you want to limit your search to a single folder or disk. Every disk attached to your PC at the moment—your hard drive, Zip disk, CD-ROM, and so on—shows up in this list. (To search your whole computer, choose My Computer and then proceed.)

- **When was it modified? What size is it?** When you click one of the double-down-arrow circle buttons, like this one, you expand the Search panel for additional options. For example, the "When was it modified?" feature lets you find only files or folders you created or changed in a certain date range (see Figure 1-13), and the "What size is it?" feature lets you screen out files larger or smaller than a number of KB you specify.

- **More advanced options.** These controls offer even more choices (again, see Figure 1-13). For example, you get a "Type of file" drop-down menu that lets you confine your search to only compressed files or Word documents. **Search system folders** makes Windows look inside all of the folders that contain the operating system

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UP TO SPEED

Typing in the File Name

No matter which kind of search you undertake, Windows XP offers you the chance to look for a file whose name you know by typing its name into the "All or part of the file name" text box on the Search panel.

You don't have to type the entire file name—only enough of it to distinguish it from the other files on your computer. Capitals don't matter, and neither does the position of the letters you type—if you type *John,* Windows will find files with names like Johnson, PeterJohn, and DJJohnson.

You can also search for all files of a specific type, such as all Word files, by typing **.doc*—that is, an asterisk, a period, and

then the three-letter filename extension of the kind of file you want. (See page 169 for more on filename extensions.) The asterisk is a wild card meaning, "any text at all."

To narrow the search, you can enter both a partial name *and* an extension, such as *mom*.doc.* This will turn up Word files named Mom's Finances.doc, Moment of Truth.doc, and so on.

Finally, note that Search can find these files even if the filename extensions themselves are *hidden.*

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itself—not something you'll generally find useful. Likewise, **Search hidden files and folders** makes the Search program find matching files among the thousands that Windows generally hides from you (see page 84).

Search subfolders is much more practical. It looks for files within folders *inside* the disk or folder you've specified. Turn this option off only when you know for sure that the file you need is in the disk or folder you're starting with, but *not* within any subfolders there. Skipping the subfolders makes the search process much faster. **Case sensitive** instructs the Search program to match the capitalization of the characters you enter; searching for files containing "dentist" won't find files containing "Dentist." And **Search tape backup**, of course, searches for the specified files on your tape-backup system, if you have one.

Windows uses the checkboxes you turn on *in addition* to any data you entered into the basic search fields.

Figure 1-13:
By clicking the double-down-arrow circle buttons, you can expand the Search panel considerably (shown here scrolled down so far that you can't even see the file names you're searching for). The search shown here will find Word documents created during June 2002 in the My Documents folder.
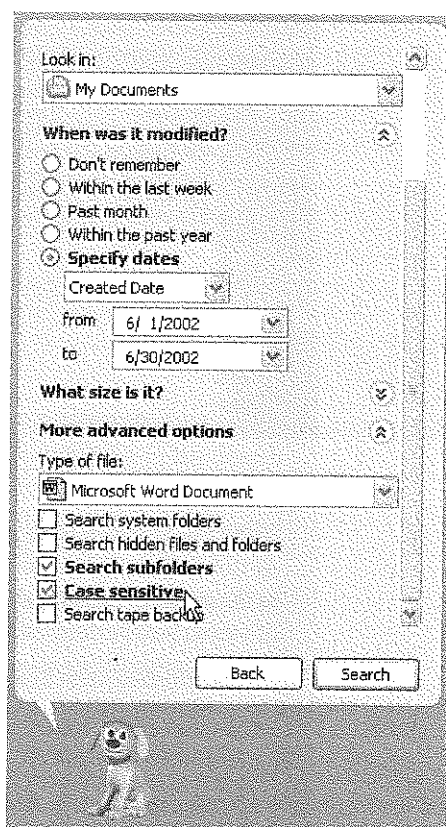
Managing the Found Files and Folders

Once you've set up the search, click the Search button (or press Enter). As the search proceeds, the screen changes. On the right side of the window, you now see a list of files and folders whose names contain what you typed in the blank. (Figure 1-14 shows this list.)

Note: Anything that Windows XP finds in your My Documents folder shows up twice in the list. Repeat to yourself each morning: "It's not my fault."
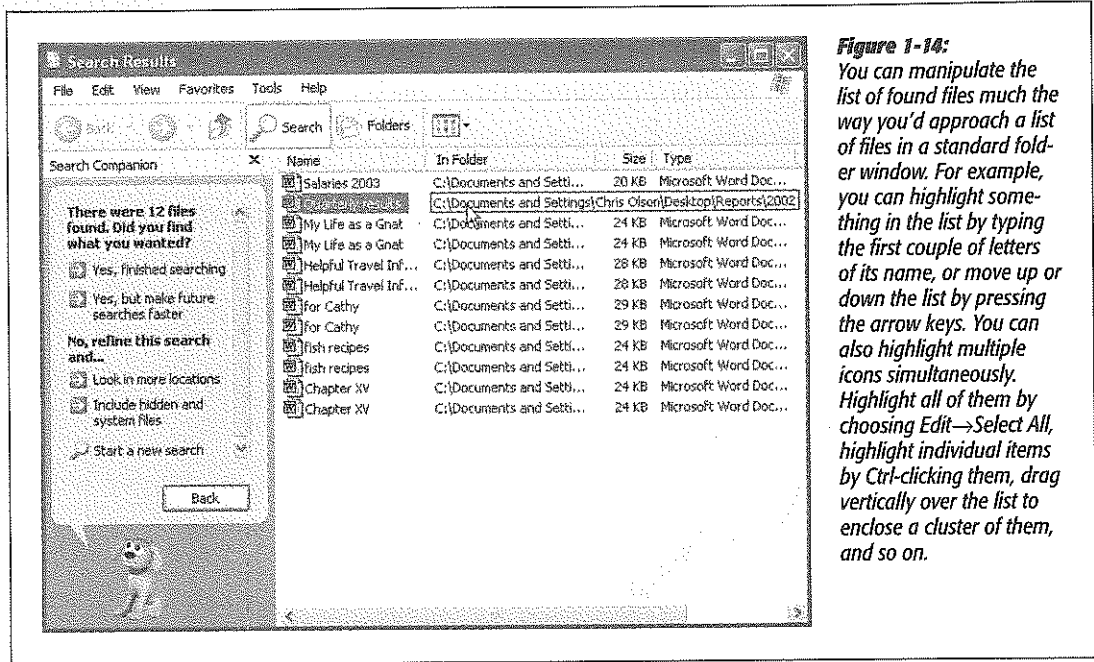
Figure 1-14:
You can manipulate the list of found files much the way you'd approach a list of files in a standard folder window. For example, you can highlight something in the list by typing the first couple of letters of its name, or move up or down the list by pressing the arrow keys. You can also highlight multiple icons simultaneously. Highlight all of them by choosing Edit→Select All, highlight individual items by Ctrl-clicking them, drag vertically over the list to enclose a cluster of them, and so on.

Using the Search Results panel

At this point, you can proceed in many different ways. A few of these ways are listed in the panel at the left side of the window (the exact assortment depends on the kind of search you performed).

• **Yes, finished searching.** Click to close the whole left panel (and lose the dog).

• **Yes, but make future searches faster.** Click this link to turn on Indexing Service, described on page 50.

• **Refine this search.** Windows XP often offers you a number of links that let you adjust the search settings you just used. For example, you may opt to perform the search again, this time including hidden and system files, or restrict the search to a different folder or disk, and so on.

HP Inc. - Exhibit 1007 - Page 56

- Sort results by category. Click the double-down-arrow circle button to open controls that let you sort the list—by name, date, and so on.

- View results differently. Click this double-down-arrow circle button to change the view of the results window—to Details, Tiles, or Thumbnails view, for example (see page 78).

- Start a new search. Click this option to start all over with new search parameters.

Using the results list

You can also manage the list of found files by treating the right side of the window just as you would any desktop window. For example:

- Read all about it. If you point to the name of a found icon, a pop-up rectangular balloon displays a little paragraph identifying the file's path, full name, modification date, size, and other information.

- Find out where something is. The In Folder column just to the right of an icon's name shows you exactly where it is on your machine, using the standard Windows path notation described on page 35.

Tip: You may have to widen the column to see the complete pathname; to do so, drag the dividing line at the top of the column, to the right of the In Folder column heading. Alternatively, point to the location information without clicking. As shown in Figure 1-14, a pop-up *tooltip* appears, revealing the complete folder path.

- Open the file. If one of the found files is the one you were looking for, double-click it to open it. This, in fact, is what most people do most of the time when using the Search program. In many cases, you'll never even know or care *where* the file was—you just want to get into it.

- Jump to an icon in its home folder. If you want to view the found file in its native habitat, sitting somewhere on your hard drive, right-click the icon in the Search window and choose Open Containing Folder from the shortcut menu. The Search window instantly retreats to the background, as Windows opens the folder and then highlights the icon in question, sitting wherever it is on your hard drive.

- Move or delete the file. You can drag an item directly out of the found-files list onto the desktop, directly onto the Recycle Bin icon, or into a different folder, window, or disk. (For more on moving icons, and all related hazards, see Chapter 3.)

- Send To, rename, or create a shortcut. After highlighting an icon (or icons) in the list of found files, you can use any of the commands in the File menu: Send To (which lets you move the icon to one of several standard folders), Rename, and so on. See page 129 for more on shortcuts.

Tip: You can also right-click a found icon to copy, move, rename, or create a shortcut to it. Just choose from the resulting shortcut menu.

- **Adjust the list.** By clicking the column headings of the results window, you can sort the list of found files in a variety of ways: by name, size, date modified, and so on. (You can reverse the order by clicking the column heading a second time.) You can also adjust the relative widths of the columns just by dragging the column-name dividers. And, as with almost any Windows window, you can drag the lower-right corner of the window to make it bigger or smaller.

- **Save the search setup.** By choosing File→Save Search, you can immortalize the search you've just set up. You might use this feature if you perform the same search each day—if, for example, you like to round up all the documents you created yesterday for backing up.

  Windows XP automatically names the search file with a description it derives from the criteria you entered into the search fields, and adds the extension .*fnd* (for example, *Files Named Budget.fnd*). You can save the resulting search icon anywhere you like.

  To use the search criteria again, double-click the saved .*fnd* file. The Search window opens, with your data already entered. Click the Search button to get the canned search underway.

Searching for Printers

When you're logged on to your Windows network domain, you search for Active Directory printers by clicking "Printers, computers or people" on the first Search screen. (Chapter 19 explains all about Active Directory.)

Note: The Find Printers dialog box isn't available to workgroup computers. If your PC is on such a network, use the Printers and Faxes option instead to locate, view, or add printers.

If you're part of a network domain, on the other hand, you can use *either* the "Printers, computers or people" to search for Active Directory printers or using the "Printers and Faxes" feature to add, locate, or view printers that are used by your PC. (Chapter 13 discusses the Printers and Faxes feature in detail.)

GEM IN THE ROUGH

Using Search to Clean Up Your Drive

You don't have to restrict your use of the Search feature to finding files you can't locate on your own. You can use its power to gather files for general hard-drive housekeeping.

If you have files about the same subject scattered in a variety of folders, you can use the Search command to gather them together. For example, search for all files with the word "budget" in the file name. Create a new folder, select all the found files in the Search Results pane (documents, spreadsheets,

accounting reports, and so on), and drag any *one* of them into the new folder to move them en masse.

You can also search for the backup files your software creates, such as files with the extensions *.xlk* (Microsoft Excel) or *.wbk* (Microsoft Word). They take up disk space, and you'll probably never use them. You can round them up using the Search command, and then delete them as a group from the Search Results pane.

On the next screen, click "A printer on the network" to open the Find Printers dialog box, as shown in Figure 1-15. On the Printers tab, click the In box's down arrow to select the entire directory or specific domain that you want to search, or click Browse to locate the domain. It isn't necessary to enter any further search criteria, but if you do want to get more specific, you have a few search options available:

- On the Printers tab, if you know the name (or part of the name) of the printer you're searching for, type it in the Name text box.

  If you want a list of all printers (or only the printers that fulfill the criteria you entered) in a particular location, enter the location's name in the Location text box.

Tip: If the Location text box is already filled in, it's because your network administrator has set up the Windows network to display the printers nearest to you. If the Location text box isn't filled in and you don't enter a location to search, Windows will search the entire Windows domain for printers, using whatever criteria you've entered.

  If you're trying to locate a specific printer model (you have a certain affinity for HP printers, say), enter the model name in the Model text box.

- On the Features tab, you can get even more specific with your search criteria, such as whether the printer can print double-sided pages or in color. You can even specify page size and resolution.

Figure 1-15:
The Find Printers dialog box lets you refine your search criteria using the Printer, Features, and Advanced tabs. Left: The Printer tab lets you enter basic search information. Middle: On the Features tab, you can get more specific in your search for the perfect printer: whether it prints in color or on both sides of the paper, for example. Right: The Advanced tab affords you the most specific search of all. You can use formulas to specify search criteria like the language the printer "speaks" or the minimum print resolution you need.
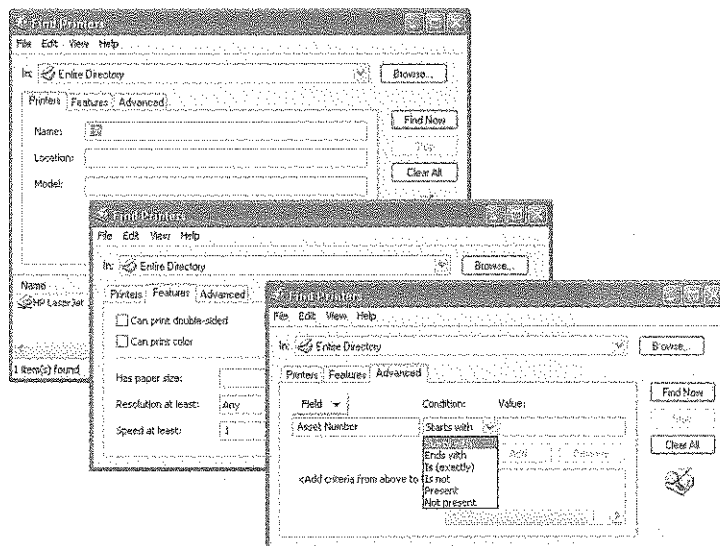
• The Advanced tab gives you additional fields to specify search criteria, like the number of pages the printer can churn out per minute. (This is a good option if you're in a big hurry.) See Figure 1-15 for details.

After you've entered your search criteria, click Find Now. When the PC finishes the search, a list of printers that fulfill your criteria appears. Connect to one of them by right-clicking its name and then choosing Connect from the shortcut menu.

Tip: As with the "All files and folders" search, you can save the search you've just set up by Choosing File→ Save Search. To use the search criteria again, double-click the saved *.fnd* file. When the Find Printers dialog box opens, click the Find Now button to commence the canned search.

Searching for Computers

If you click "Printers, computers or people" on the first Search screen, and then click "A computer on the network" on the next one, the Search program lets you type in the name of another computer on your network (if you're on one). If you search for *ac,* the search will turn up *accounts, packages,* and so on. There's no browse function; you have to know at least part of the name of the computer you want to find.

Of course, if you're trying to find another PC on the network, you can simply open the My Network Places window (page 53), which shows you icons representing all the computers on your network. So why would you ever use the Search function to find a computer? Because it sometimes finds computers that My Network Places can't. Every Windows veteran has lost count of the number of times computers have been missing from My Network Places. In such cases, the Search function is the reliable way to locate the computer and thus access its contents.

Searching for People

If you click "Printers, computers or people" on the first Search screen, you'll find, on the second screen, an option called "People in your address book." This tantalizing option lets you type in somebody's name; the Search program can consult any of several "White Pages" Web sites online in an attempt to track down that person's email address and telephone number. It can also search your own Windows address book when you want to check someone's phone number or other information.

Note: This option has additional power when used on a corporate domain network. See Chapter 19 for more on domains, and page 50 for more on searching for people (or their phone numbers) on yours.

Searching your address book

As one of the bonus freebie programs that come with Windows XP, you get a program called Address Book. (It's an address book.) You can look at yours by choosing Start→All Programs→Accessories→Address Book, although the place you're likely to use it the most is when you're in an email program like Outlook Express, which is described in Chapter 12.

In any case, clicking "People in your address book" brings up the dialog box shown in Figure 1-16.

Searching phone books on the Internet

No matter how social a person you are, it's theoretically possible somebody out there has managed to elude your address book. There may be times that you want to look up the phone number or email address of someone who's not only not in your address book, but not even in your *physical* phone book. Fortunately, you live in the Internet age, where a number of Web sites serve as worldwide "White Pages."

Use the Look In drop-down list (see Figure 1-16) to display a list of these people-finding Web sites (Bigfoot, WhoWhere, and so on). Now choose a search service; as a little experimentation will quickly demonstrate, some of these sites work better than others.

Figure 1-16:
Windows assumes that you want to search your address book for a certain name or email address. Enter information in one or more fields—you can use partial words—and then click the Find Now button. All matching entries appear at the bottom of the window.
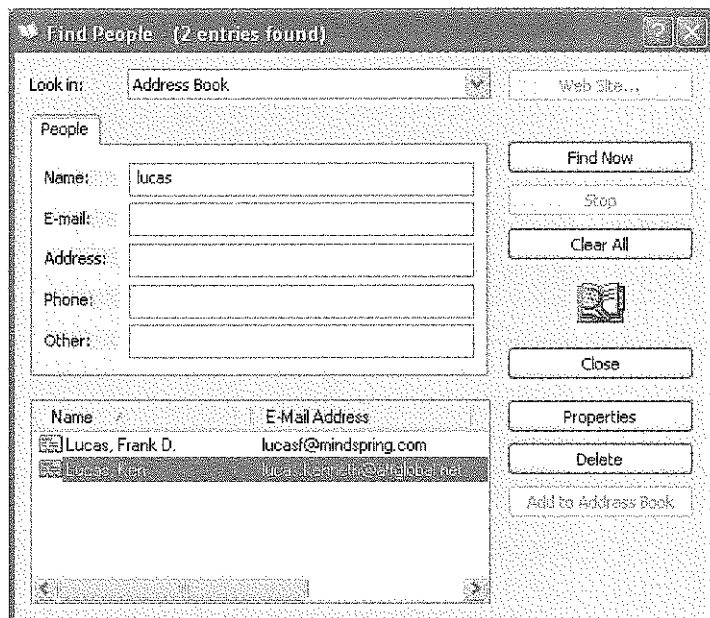
You must be connected to the Internet to use this feature (or your browser must be configured to start your Internet connection automatically when it opens; see page 316). The dialog box that appears has two tabs:

• The People tab provides a place to enter a name, email address, or both. Use this tab if you know that information, and need a street address or a telephone number.

HP Inc. - Exhibit 1007 - Page 61

• The **Advanced** tab lets you narrow your search. As you can see in Figure 1-17, you can make some very fine distinctions when describing the person you're trying to find.
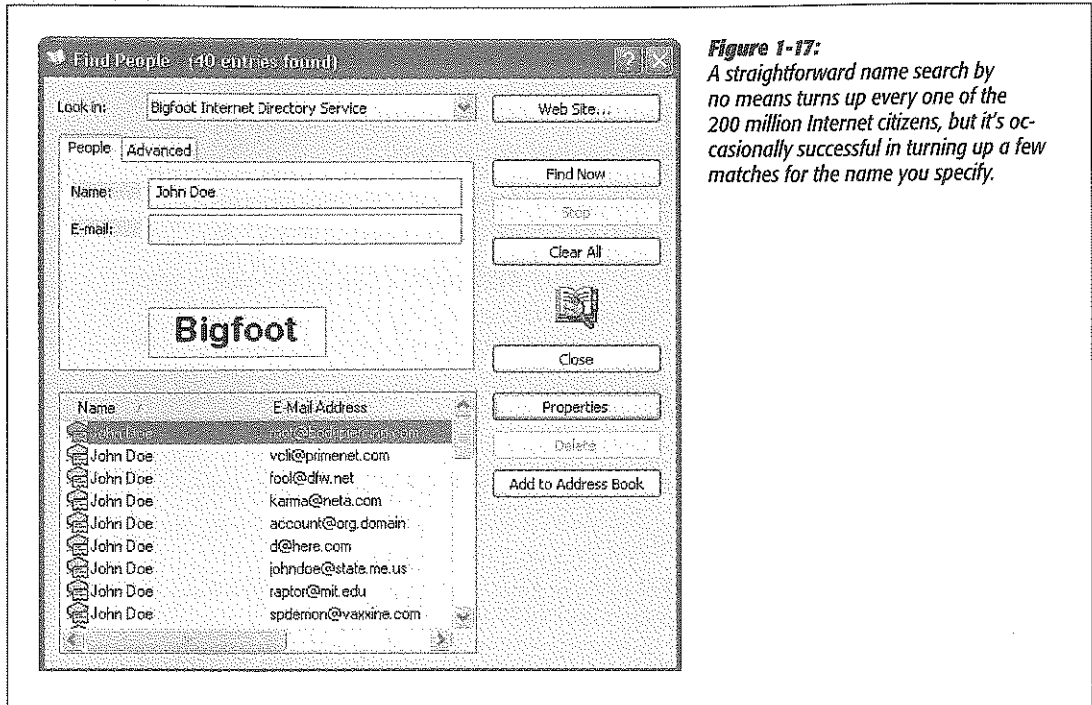
Figure 1-17:
A straightforward name search by no means turns up every one of the 200 million Internet citizens, but it's occasionally successful in turning up a few matches for the name you specify.

When you're finished setting up your search, click the Find Now button. The Search program uses your existing Internet connection to send the query off to the chosen Web site. After a few minutes, you'll get a response, even if it's "No response."

Unfortunately, the technology gods don't smile on this feature. Sometimes you get outdated email addresses. And sometimes you get no results at all—the search Web sites do one quick pass of their databases and then return an error message. That message might say simply that the person couldn't be found, or it might say, "The search could not be completed within the time specified for this directory service." (In other words, the search engine took a quick look, didn't find an exact match, and doesn't want to keep looking.)

Tip: Instead of using the Find People dialog box, it's frequently more productive to work directly on the directory Web page. After choosing the search engine you want to use from the drop-down list, click the Web Site button. In a flash (or in a few minutes, depending on the speed of your Internet connection), you're on the Internet and the browser window displays the search engine you selected. Working from the search engine directly on the Web instead of using the Search feature as an intermediary offers more powerful choices for searching.

HP Inc. - Exhibit 1007 - Page 62

Searching the Internet

Any old computer can search for the files on its own hard drive. The Search Companion's special twist, however, is that it lets you use exactly the same program to search for information on the World Wide Web.

To put the program into search-the-Internet mode, click Search the Internet on the main Search panel (shown at left in Figure 1-11). The "What are you looking for?" panel appears, complete with a place to type a search phrase.

When you click the Search button, your PC goes online and submits that request to MSN Search, which is Microsoft's version of a search page like Google or Yahoo.

Figure 1-18:
Top left: When you search the Internet, don't mind the "Sample question" that appears beneath the search blank; it's simply designed to give you some ideas of the ways you can phrase your search requests.

Top right: You get a list of Web pages that contain the text you seek, along with some suggestions on ways to "refine your search" (such as visiting Microsoft's commercial partners to buy books, music, and so on). The best part is the "Automatically send your search to other search engines" link (not shown). If you click it, Windows puts each of the major search pages only one click away.

Bottom: From here, you can generally read the first paragraph of text that appears on the Web page, go to the page by clicking its link, and so on.
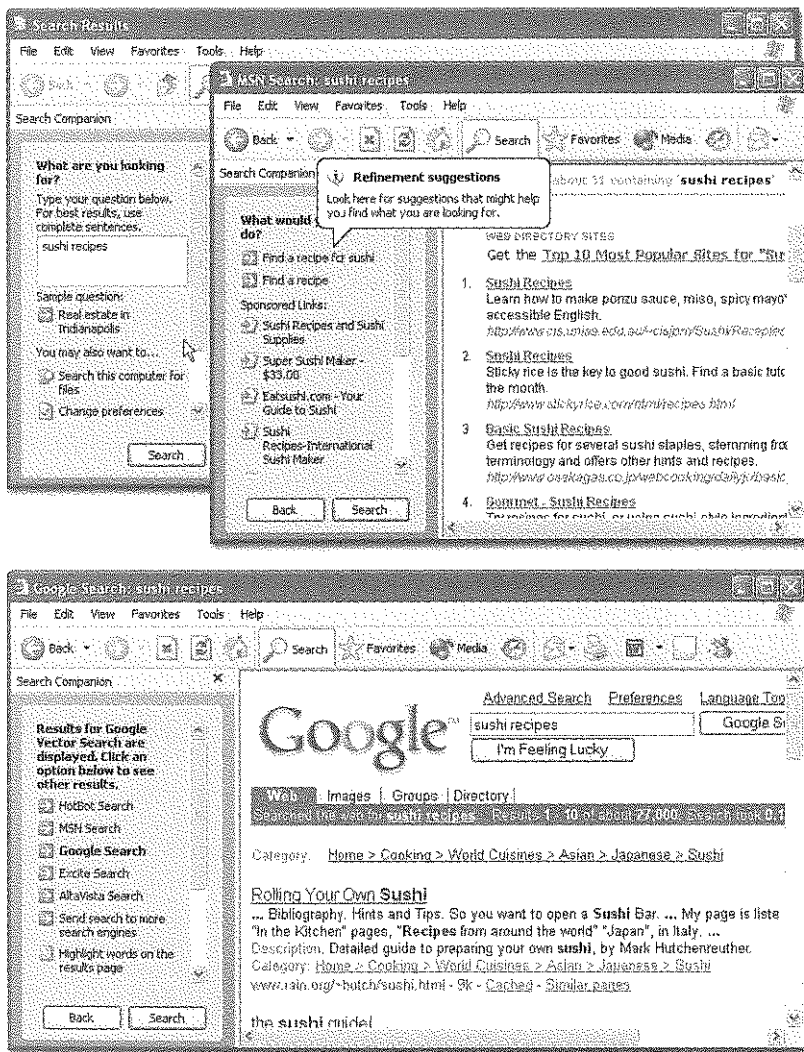
Tip: To specify which search engines Windows XP consults, click "Change preferences" in the main Search panel and then click "Change Internet search behavior." You now have the opportunity to specify the default search engine you want Windows to use: Google, AltaVista, Yahoo, or whatever.

Windows now goes online, sends your search request to the selected Web site and, after a moment, shows you the results of its search: a list of Web pages containing the text you typed (see Figure 1-18).

The Indexing Service

The regular Windows XP Search command can locate words inside your files—a handy feature when you're trying to turn up a document whose contents you know, but whose name you can't remember. Just don't try it on a deadline; it's painfully slow.

To eliminate that delay, Microsoft has programmed Windows XP with an optional feature that does something ingenious. Like a kid cramming for an exam, it can read, take notes on, and memorize the contents of all of your text-based files: text files, HTML documents, Microsoft Office files, email, and so on. (You can make it understand other kinds of documents, too, if you buy additional filters made by third-party software companies.)

After *indexing* your hard drive in this way, XP can pinpoint text or file properties in seconds. The only downside is that you sacrifice a few megabytes of disk space to the hidden "card catalog."

If that's a tradeoff you're willing to make, you'll definitely enjoy the Windows XP *Indexing Service*, as it's called (just as it was in Windows 2000).
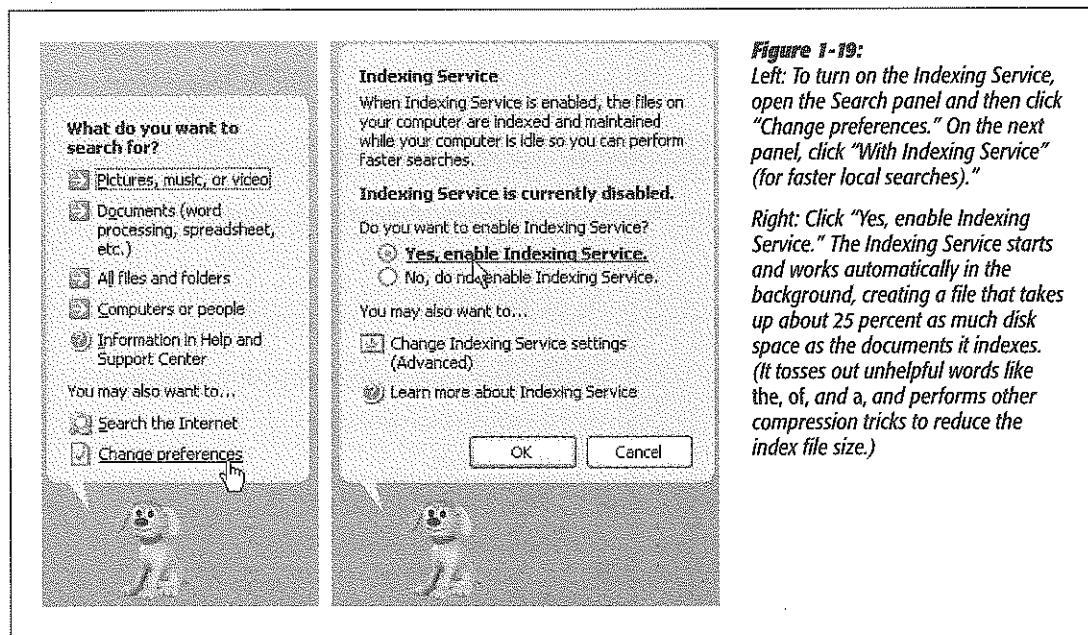
Figure 1-19:
Left: To turn on the Indexing Service, open the Search panel and then click "Change preferences." On the next panel, click "With Indexing Service" (for faster local searches)."

Right: Click "Yes, enable Indexing Service." The Indexing Service starts and works automatically in the background, creating a file that takes up about 25 percent as much disk space as the documents it indexes. (It tosses out unhelpful words like the, of, and a, and performs other compression tricks to reduce the index file size.)

To index your files, proceed as shown in Figure 1-19.

Tip: The free Google Desktop Search program, available at *www.google.com,* is a powerful and much easier to use replacement for both the regular Windows Search program and the indexing service. It can even find words inside your email messages, chat-session logs, and Web pages you've visited.

Once the Indexing Service has completed its analysis of the files on your machine—which can take many hours—you don't need to do anything special when searching for words inside your files. Just enjoy the amazing speed with which your Search

POWER USERS' CLINIC

Indexing Service to the Max

There's more to Indexing Service than just using the regular Search Companion program. You can actually use a specialized query-submission *language* to perform extremely targeted searches.

It turns out, for example, that Indexing Service logs much more than just the words inside your files. It also notes and records their *properties*, or file attributes. They go by the names of *Access* (the last time somebody opened the file), *DocAppName* (the name of the program that created the file), *DocAuthor* (whoever created the document, in programs that offer this feature), *DocLastPrinted* (when the document was last printed), *DocSlideCount* (number of slides in a PowerPoint file), *DocWordCount* (number of words in a text file), *Size* (size of the document, in bytes), *Write* (date last modified), and so on.

(Want to see the complete list of the searchable attributes? Cancel your appointments for the afternoon, and then follow the steps indicated in Figure 1-20. Click Query the Catalog, the Tips for Searching link, and then the Query Syntax button.)

To perform a property search using the Search program, click the "A word or phrase in the file" text box shown in Figure 1-11. Then type the @ symbol, followed by the property type you want, an = sign (or < or >), and the value in question. In other words, here's how you would look for a Word document with at least 1500 words in it:

@DocWordCount >1500

Similarly, if you want to round up documents you've printed within the last 50 hours, you could type this into the "A word

or phrase in the file" text box—

@DocLastPrinted >-2d2h

—because you express times and dates relative to the current time by using a minus sign and then *h* for hours, *d* for days, *w* for weeks, *m* for months, *y* for years, and so on.

It's worth noting that that @ business is shorthand for a much more complex and flexible system, which Microsoft will be phasing in during the coming years. The more complex syntax uses *property tags* that look something like the HTML tags that form Web-page code, like this:

{prop name=write} >2002/6/5 12:00:00 {/prop}

(This particular phrase would find documents modified after-noon on June 5, 2002.)

These tags are useful in another case, too. Everyday searches for words inside your files tell Windows to round up files containing those words in *any* order. If you search for *Long John Silver*, you'll get documents containing a sentence like, "It took John a long time to find the silver."

But if you enclose the search phrase with the *phrase* tags, you'll get only files that contain *exactly* the phrase you typed: *{phrase} Long John Silver {/phrase}.* In other words, you can use the {phrase} tags the way you use quotation marks on a Web search engine.

Clearly, you can get very deep into the Indexing Service querying language, combining the various search phrases by joining them with a & symbol, using wild card characters (*), even using UNIX-style regular expressions. (*Indexing Service: The Missing Manual,* anyone?)

program now rounds up files according to their contents or properties—and enjoy the fact that the Indexing Service will *continue* to keep itself up to date, automatically indexing any files you create or edit.

Note: When Indexing Service is turned on, capitalization doesn't matter, and Windows ignores short words like *of, it, is,* and so on. Note, too, that Indexing Service refuses to search folders that belong to other people with accounts on your PC (unless, of course, they marked those folders as Shared). Chapter 20 has full details.
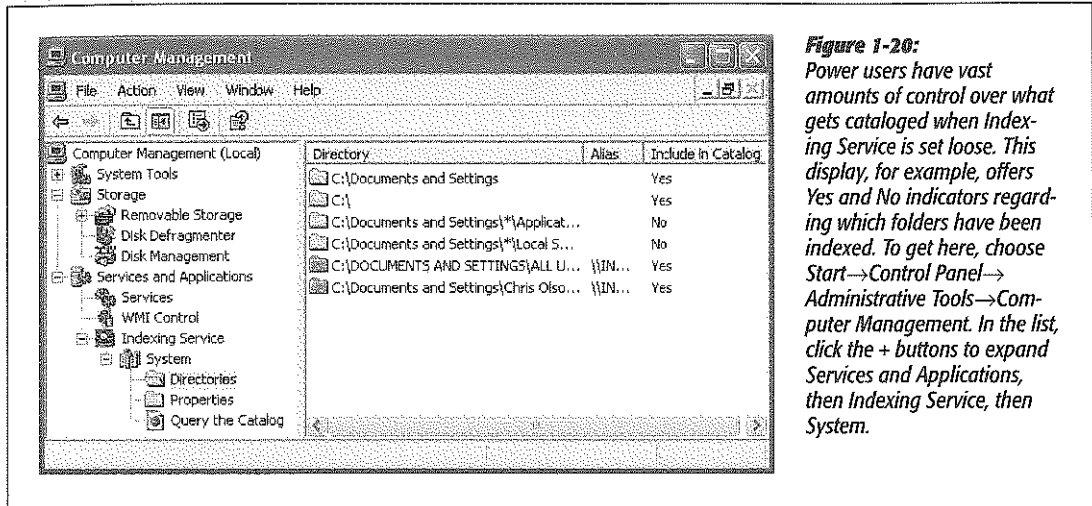
Figure 1-20:
Power users have vast amounts of control over what gets cataloged when Indexing Service is set loose. This display, for example, offers Yes and No indicators regarding which folders have been indexed. To get here, choose Start→Control Panel→ Administrative Tools→Computer Management. In the list, click the + buttons to expand Services and Applications, then Indexing Service, then System.

Start→Help and Support

Choosing Start→Help and Support opens the new, improved Windows Help and Support Center window, which is described in Chapter 4.

Tip: Once again, speed fans have an alternative to using the mouse—just press the F1 key to open the Help window.

Start→Control Panel

This extremely important command opens an extremely important window: the Control Panel, which houses two dozen programs you'll use to change almost every important setting on your PC. It's so important, in fact, that it gets a chapter of its own (Chapter 8).

HP Inc. - Exhibit 1007 - Page 66

Start→Set Program Access and Defaults

This awkwardly named command appears only if you've installed Service Pack 1 or 2. It's actually just a shortcut to the Set Program Access and Defaults panel of the (equally clunkily named) Add or Remove Programs control panel.

Its purpose is to let your specify which program (not necessarily Microsoft's) you want to use as your Web browser, email program, instant-messaging program, Java module, and music player—a choice offered by Microsoft to placate the U.S. Justice Department. Details are on page 179.

Start→My Network Places

In previous versions of Windows, a My Network Places icon used to appear on everybody's desktop. Of course, for the millions of non-networked PC users in their home offices and bedrooms, it never made much sense. In Windows XP Professional, in fact, My Network Places appears only when your PC joins a network—and then only in the Start menu. (You can also put its icon on the desktop yourself, as described on page 22.)

In any case, once it's there, choosing this command opens the My Network Places window, which displays icons for the computer, disks and folders other people on the office network have made available for rummaging. (Much more on this topic in Chapter 20.)

Start→My Computer

The My Computer command is the trunk lid, the doorway to every single shred of software on your machine. When you choose this command, a window opens to

FREQUENTLY ASKED QUESTION

The View from a Window

The My Computer window at home and the My Computer window on my PC at work don't look alike. What's up with that?

The difference is that your PC at work is probably on a network domain, and the one at home belongs to a smaller, less formal workgroup network. As you'll discover over and over again, the Windows XP Pro experience is slightly different depending on which kind of network you're on.

On a computer that's part of a domain, you see only two sections: "Hard Disk Drives" and "Devices with Removable

Storage" (as shown at top in Figure 1-21).

On a workgroup PC, you get a third section, called "Files Stored on This Computer" (Figure 1-21, bottom). It lists the My Documents folders for each person who has an account on—and who has logged on to—this computer.

Why? Because in a corporation, your files probably aren't even *on* your PC. They probably sit on some centralized server machine elsewhere on the network. So there probably *aren't* many "files stored on this computer."

reveal icons that represent each disk drive (or drive partition) in your machine, as shown in Figure 1-21.

For example, by double-clicking your hard-drive icon and then the various folders on it, you can eventually see the icons for every single file and folder on your computer. (The My Computer icon no longer appears on the desktop—unless you put it there, as described on page 22.)

Tip: You don't have to live with "My This, My That" as the names of the important Windows folders. You can easily rename them, as described on page 65.

Figure 1-21:
The My Computer window is divided into two sections on a computer that's a member of a network domain, and three sections on a computer that's a member of a workgroup.

Top: The screen you see when your computer joins a network domain. At the top of the screen comes a list of hard drives, followed by a list of removable-disk drives. This computer has one floppy drive, two hard drives (or one partitioned hard drive, as described in Appendix A), and one CD-ROM drive. (If there's a disk in the CD-ROM drive, you get to see its name, not just its drive letter.)

Bottom: If your computer is a member of a workgroup, you see an additional section at the very top of the screen, which has an icon for the My Documents folder of each person who has an account on this computer. When you select a disk icon (on either type of computer) by clicking it, the Details pane on the left side of the window displays its file system, capacity, and amount of free space.
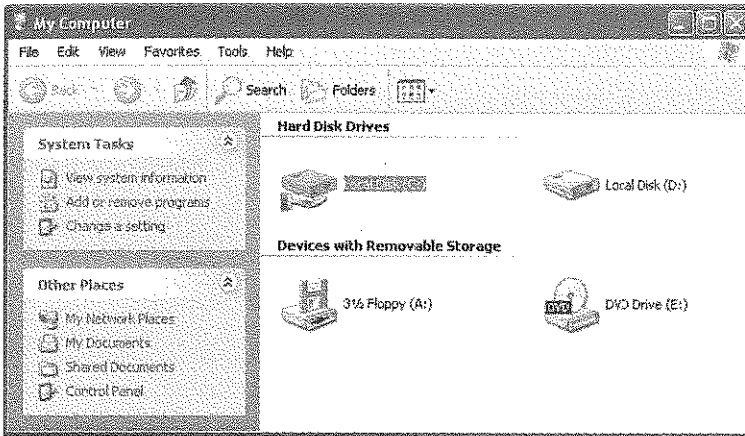
Start→My Music, My Pictures

Clearly, Microsoft imagined that most of its Windows XP customers would be multimedia mavens, decked out with digital cameras and MP3 music players. To hammer home the point, it has stocked your My Documents folder with My Pictures and My Music folders to store digital photos and music files, respectively.

If you do indeed have a digital camera or MP3 player (and it's Windows XP–compatible), you'll probably find that whatever software came with it automatically dumps your photos into, and sucks your music files out of, these folders. You'll find much more on this topic in Chapter 7.

Tip: If you don't feel the need to stare at these folder names in your Start menu day after day, it's easy enough to get rid of them. Right-click the Start menu; from the shortcut menu, choose Properties. In that dialog box, click the Start Menu tab, click Customize, and then click the Advanced tab. Now scroll down in the Start menu items list until you see My Music or My Pictures. Click "Don't display this item," and then click OK.

Start→My Recent Documents

You should see the My Recent Documents menu command in your Start menu by default. If you don't, you can turn it on using the techniques described in the box below.

There's one good reason for turning on this menu: It adds to your Start menu a submenu listing the last 15 documents you've opened. Using a list of recent documents

NOSTALGIA CORNER

Restoring the Traditional Folder Listings

Some of the commands that populated the Start menus of previous Windows versions no longer appear in the home version of Windows XP. That's by design, of course: Microsoft is trying to make its new operating system look less overwhelming to the newcomer.

But if you miss some of the old folders—My Network Places and My Recent Documents, for example—it's easy enough to put them back.

Right-click the Start menu. From the shortcut menu, choose Properties. Now the Taskbar and Start Menu Properties dialog box appears, on the Start Menu tab, click the Customize button, and then the Advanced tab.

In the scrolling list, you'll find a checkbox that makes My Network Places appear in the Start menu. Windows 2000 veterans may also want to turn on "Display as Connect to menu" under Network Connections, so that you have a handy submenu of network connections in your Start menu. If you scroll all the way to the bottom of the list, you'll also see an option that adds System Administrative Tools to your All Programs menu and even to your Start menu. (You can read about these technical utilities in Chapter 16.)

At the bottom of the dialog box, turn on "List my most recently opened documents" to add the My Recent Documents command to your Start menu. Click OK twice to return to the desktop and try out your changes.

can save you time when you want to reopen something you've worked on recently, but you're not in the mood to burrow through folders to find its icon.

Note, however, that:

- Documents appear on the "recently used" list only if your applications are smart enough to update it. Most modern programs (including all Microsoft programs) perform this administrative task, but not all do.

- The Documents list doesn't know when you've deleted a document or moved it to another folder or disk; it continues to list the file even after it's gone. In that event, clicking the document's listing produces only an error message.

Tip: Of course, there's another easy way to open a document you've recently worked on. To start, simply launch the program you used to create it. Many programs maintain a list of recent documents at the bottom of the File menu; choose one of these names to open the corresponding file.

Start→My Documents

This command opens up your My Documents folder, which, until Windows XP, appeared as an icon on your desktop. It's designed to hold the data files you and your programs create.

Of course, you're welcome to file your documents *anywhere* on the hard drive, but most programs propose the My Documents folder as the target location for newly created documents.

Sticking with that principle makes a lot of sense for three reasons. First, it makes navigation easy. You never have to wonder where you filed some document, since all your stuff is sitting right there in the My Documents folder. Second, this arrangement makes backing up easy, in that you can drag the entire My Documents folder right onto a Zip disk or blank CD.

UP TO SPEED

The Not-My-Documents Folder

Whenever you log on, Windows XP provides a My Documents folder just for you. (It actually sits in the My Computer→Local Disk (C:)→Documents and Settings→[Your Name] folder.)

This feature can be confusing if you're not expecting it. For example, if you stop by the computer after somebody else has logged in, none of your stuff is where you expect to find

it—specifically, in the My Documents folder. That's because the computer no longer opens *your* documents folder when you choose Start→My Documents.

If this happens to you, check the name that appears at the top of the Start menu. It identifies who's currently logged on—and whose documents are showing up in the My Documents window.

Third, remember that Windows XP has been designed from the ground up for *computer sharing.* It's ideal for any situation where different family members, students, or workers share the same PC. Each person who uses the computer will turn on the machine to find her own separate, secure set of files, folders, desktop pictures, Web bookmarks, preference settings—and My Documents folder. (Much more about this feature in Chapter 20.)

Figure 1-22:
Top: The only task you can perform on this first screen is to turn off the new, Windows XP double-column Start menu design to return to the older, single-column Classic Start menu design of Windows versions gone by. The good stuff awaits when you click the Customize button.

Bottom: Here's the General tab of the Customize Start Menu dialog box. (The Clear List button refers to the lower-left section of the Start menu, which lists the programs you use most often. Click Clear List if you don't want to risk your supervisor coming by while you're up for coffee, and noticing that your most recently used programs are Tetris Max, Myst III, Tomb Raider, and Quake.)
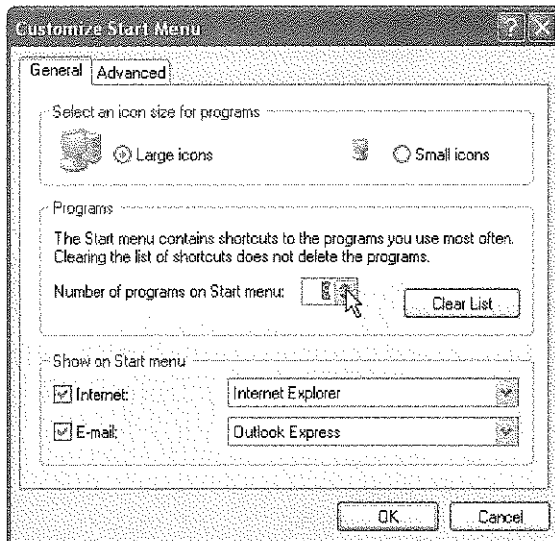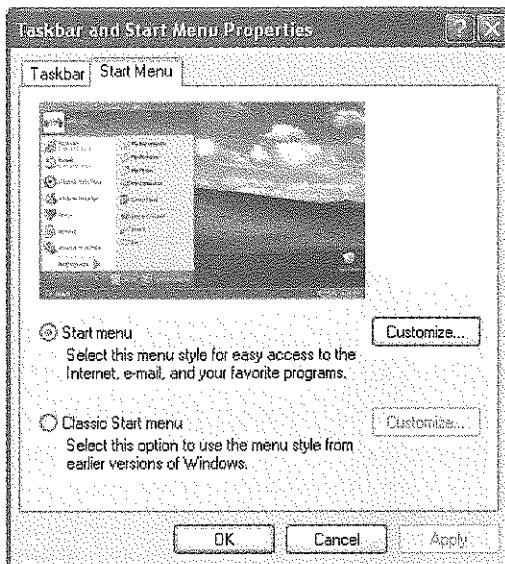
Customizing the Start Menu

As millions of Windows users have demonstrated, it's perfectly possible to live a long and happy life without ever tampering with the Start menu. For many people, the idea of making it look or work differently comes dangerously close to nerd territory. (It's true that listing your favorite files there gives you quicker access to them—but it's even easier to use the Quick Launch toolbar, as described on page 99.)

Still, knowing how to manipulate the Start menu listings may come in handy someday, and provides an interesting glimpse into the way Windows works.

Note: Thanks to the User Accounts feature described in Chapter 17, any changes you make to the Start menu apply only to *you.* Each person with an account on this PC has an independent, customized Start menu. When you sign on to the machine using your name and password, Windows XP loads *your* customized Start menu.

Basic Start Menu Settings

Microsoft offers a fascinating set of customization options for the Start menu. It's hard to tell whether these options were selected by a scientific usability study or by a dartboard, but you're likely to find something that suits you.

To view and change the basic options, right-click the Start menu; choose Properties from the shortcut menu. Now the Taskbar and Start Menu Properties dialog box opens, as seen in Figure 1-22.

The General tab

When you click the Customize button, you see the dialog box shown at right in Figure 1-22. Here you're offered a random assortment of Start menu tweaks:

- **Select an icon size for programs.** Turning on "Small icons" gives you smaller icons next to the commands in the left column of the Start menu. (You *always* get small icons on the right side and in the All Programs menu.) As a result, the Start menu is more compact. Consider converting to small icons as your All Programs menu gets crowded.

FREQUENTLY ASKED QUESTION

Opening the Control Panel Window When You Can't

OK, I'm with you—I turned on "Display as a menu" for the Control Panel, so now I can open any Control Panel program directly from my Start menu. Trouble is, now I can't open the Control Panel window itself. Nothing happens when I click the Start→Control Panel command. How do I open the Control Panel window?

Ah, there's a troublemaker in every class.

Click the Start button to open the menu; slide up to Control Panel, and then *right-click* Control Panel. Choose Open from the shortcut menu. You're back in business.

- **Number of programs on Start menu.** The number here refers to the lower-left column of the Start menu, the one that lists programs used most often. By increasing this number, you make the Start menu taller—but you ensure that more of your favorite programs are listed and ready to launch.

- **Show on Start menu.** Use these checkboxes and drop-down menus to specify whether or not you want your Web browser and email program listed at the top of the left-hand Start menu column—and if so, which ones.

The Advanced tab

Microsoft may call these options Advanced, but they affect the Start menu in some fairly simple and profound ways.

Figure 1-23:
Top: When "Display as a link" is selected for Control Panel, you, like generations of Windows users before you, can't open a particular Control Panel program directly from the Start menu. Instead, you must choose Start→Control Panel, which opens the Control Panel window; now it's up to you to open the program you want.

Bottom: Turning on "Display as a menu" saves you a step. You now get a submenu that lists each program in the Control Panel folder. By clicking one, you can open it directly. This feature saves you the trouble of opening a folder window (such as Control Panel or My Documents), double-clicking an icon inside it, and then closing the window again.
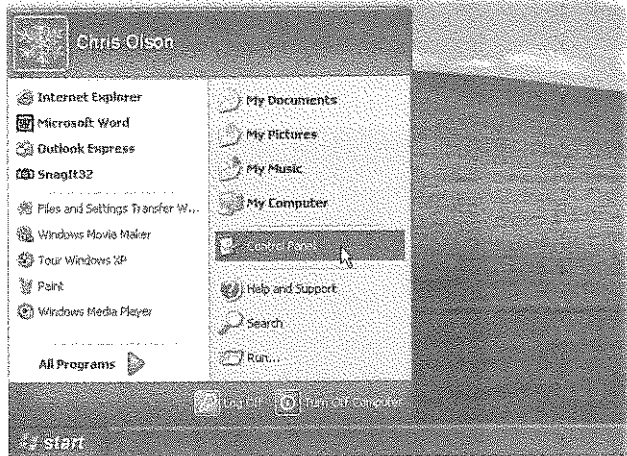
Here, in fact, is where you'll find the on/off switches for every single command on the *right side* of the Start menu, among other things.

- **Open submenus when I pause on them with my mouse.** When this checkbox is turned on, you don't actually have to click a submenu to view its options.

- **Highlight newly installed programs.** Whenever you (or some techie in the building) install a new program into the Start menu, it shows up with orange highlighting for a few days. The idea, of course, is to grab your attention and make you aware of your expanded software suite. If you could do without this kind of reminder, then just turn off this checkbox.

- **Control Panel, My Computer, My Documents, My Music, My Pictures, Network Connections.** Beneath each of these headings, you'll find three options. The middle one, "Display as a menu," is extremely useful. It means that instead of simply listing the name of a folder (which is what "Display as a link" means), your Start menu sprouts a submenu listing the *contents* of that folder, as shown at bottom in Figure 1-23.

NOSTALGIA CORNER

Options for the Classic Start Menu

If you've turned on the Classic (single-column) Start menu as described on page 25, clicking the corresponding Customize button shown in Figure 1-22 offers its own dialog box full of options.

Some are the same options described on these pages. The rest either control which commands are listed in the menu (checkboxes beginning with the word Display) or turn certain commands into submenus (checkboxes beginning with the word Expand). This is a very handy feature when applied to the Control Panel, for example.

Finally, note the option called Use Personalized Menus. When this checkbox is turned on, Windows watches you and studies your behavior (that is, even more than usual).

If it notices that you haven't been using certain Start menu commands, Windows hides them, making the menu listing shorter, as shown here at left.

The double-arrow button at the bottom of the All Programs menu indicates that there's more to the list than you're seeing; click it to see the full menu, as shown here at right.
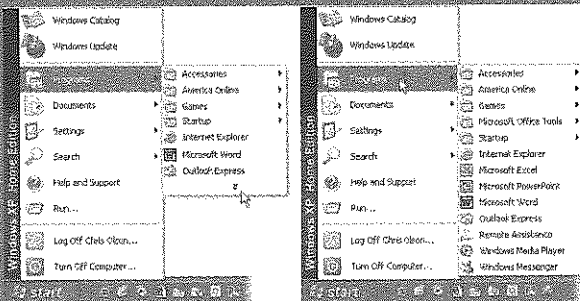
Some people find it disconcerting that Personalized Menus *changes* the Start menu frequently, making it difficult to get used to the positions of familiar items. Other people find that this feature makes the All Programs menu and its submenus easier to use, because it frees them from hunting through commands that they don't use much.

("Don't display this item," of course, removes the folder in question from your Start menu altogether. That's a good point to remember if you ever set down your PC and discover that, for example, the Control Panel appears to have disappeared.)

- **Enable dragging and dropping.** Turning on this checkbox has two benefits. First, it lets you customize your Start menu just by dragging icons onto it, as described in the next section. Second, it lets you right-click Start menu items, which produces a useful shortcut menu containing commands like Rename, Properties, and Remove from This List. (If this checkbox is turned off, right-clicking Start menu items has no effect.)

- **Favorites menu.** This option adds a Favorites command to the Start menu that lists your favorite Web sites and icons (files, folders, and so on). Thereafter, you can use the Start menu to launch Internet Explorer and travel directly to the selected site.

- **Help and Support, Run command, Search.** These checkboxes govern the appearance of the corresponding commands in the Start menu. For example, if you've absorbed the fact that pressing the F1 key always opens the Windows help program, you may as well reclaim the screen space occupied by this command in the Start menu by turning it off here.

- **Network Connections.** If you find yourself switching between different methods of getting online (or onto a network)—for example, switching your laptop between the cable modem when you're at home and its dial-up modem when you're on the road—turn on "Display as Connect to menu." From now on, you'll be able to switch network connections just by choosing from the submenu in your Start menu.

- **Printers and Faxes.** Turn on this checkbox if you'd like your Start menu to provide direct access to the Printers and Faxes folder, or the icons that appear for each printer and virtual fax machine you've installed (see Chapter 13).

- **Scroll Programs.** This option changes how the Start→All Programs menu looks when there are too many programs listed to fit on the screen. Ordinarily when this situation arises, a second All Programs menu appears to the right of the first one, continuing the list. But if you turn on this checkbox, all your programs appear instead on one massive, scrolling programs list. As you scroll down past the last visible name, the top of the All Programs menu scrolls off the screen.

Adding Icons to the Start Menu

Usually, when you install a new program, its installer automatically inserts the program's name and icon in your Start→All Programs menu. There may be times, however, when you want to add something to the Start menu yourself, such as a folder, document, or even a disk.

The "free" sections of the Start menu

In the following pages, you'll read several references to the "free" portions of the Start menu. These are the two areas that you, the lowly human, are allowed to modify freely—adding, removing, renaming, or sorting as you see fit:

- **The top-left section of the Start menu.** This little area lists what Microsoft calls *pinned* programs and files—things you use often enough that you want a fairly permanent list of them at your fingertips.

- **The All Programs menu.** This, of course, is the master list of programs (and anything else—documents, folders, disks—you want to see listed).

These two legal areas are highlighted back in Figure 1-4.

Figure 1-24:
Top: You can add something to the top of your Start menu by dragging it (from whatever folder it's in) onto the Start button to open the Start menu, and then dragging it directly into position. (Once the Start menu is open, you can also drag it onto the All Programs button—and once that menu is open, drag it anywhere in that list.)

Bottom: When you release the mouse, you'll find that it's been happily ensconced where you dropped it. Remember, too, that you're always free to drag anything up or down in the "free" areas of the menu: the circled area shown here, and the All Programs list.

HP Inc. - Exhibit 1007 - Page 76
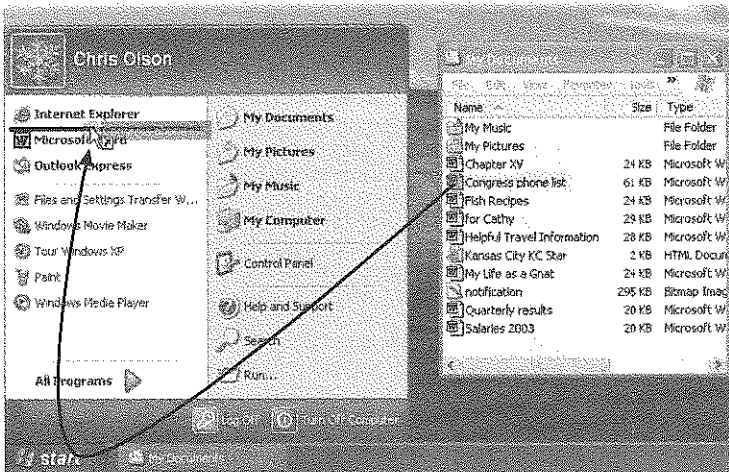
In other words, most of the following techniques don't work when applied to the listings in the *right* column, nor the lower-*left* quadrant of the Start menu, where Windows XP lists the programs you use most frequently.

Method 1: Drag an icon directly

Microsoft wouldn't be Microsoft if it didn't provide at least 437 different ways to do this job. Here are three of the world's favorites:

1. **Locate the icon you want to add to your Start menu.**

   It can be an application (see the box on the facing page), a document you've created, a folder you frequently access, one of the programs in your Control Panel's folder, or even your hard drive or floppy-drive icon. (Adding disks and folders to the Start menu is especially handy, because it lets you dive directly into their contents without having to drill down through the My Computer window.)

Tip: Adding an application name to your All Programs menu requires that you find the program *file*, as described in the box below. To do so, either use the Search command described earlier in this chapter, or use the Windows Explorer window described in Chapter 3. You'll find your program files in the My Computer→ Local Disk (C:)→Program Files folder.

---

2. **Drag it directly onto the Start button.**

   If you release the mouse now, Windows adds the name of the icon you've just dragged to the bottom of the list at the top-left section of the menu (Figure 1-24, right).

   But if "Enable dragging and dropping" is turned on, as described in the previous section, you're free to drop it wherever you want among the items listed in the top-left section of the menu (Figure 1-24, left).

FREQUENTLY ASKED QUESTION

Which One's the Program?

I want to add a program to my Start menu like you said. But where is the program's icon?

To discover the program file name of a favorite program, open your My Computer→Local Disk (C:)→Program Files folder. Inside you'll find folders containing all of your applications—and inside each of *these* folders, you'll find icons for each application's components. Right-click the window, choose View→Details from the shortcut menu, and look for an icon whose Type column says "application."

OK, I did that. But in the program's folder, there are 15 million little files that all say they're applications. How do I know which is the actual application file?

First, you can usually recognize which application is the primary one both by its short-form name and by its icon. *WinWord* is probably a good hint that you've found Word for Windows, for example. Second, the instructions from the software company may tell you which file to click.

Similarly, if you drag to the Start button and then onto the All Programs command without releasing the mouse, you can place it exactly where you want in the Start→All Programs menu.

Tip: After making a mess of your Start→All Programs menu by dragging icons onto it, you may want to restore some order—specifically, alphabetical. That's easy: Just right-click anywhere on the open All Programs menu and choose Sort By Name from the shortcut menu.

Two Start Menu folders:

Figure 1-25:
Left: What you see in the Start→All Programs menu is a composed of the shortcuts in two Start Menu folders, as shown circled here in Windows Explorer. Note the two different Start Menu folders, as indicated by the arrows: one for All Users, and one for only you.

Right: Anything you place directly into one of these Start Menu folders (as opposed to inside the Programs folder) appears above the horizontal line in the Start→All Programs menu.

Method 2: Use the Add Listing Wizard
If you've placed your Start menu into the single-column Classic mode, the same drag-and-drop routine works for adding new programs. But you can also use one of Microsoft's wizards for the same purpose. Right-click the Start button; choose Properties from the shortcut menu; and click Customize to view the Add, Remove, and Sort buttons available to you there.

Method 3: Use the Start Menu folders
Windows XP builds the All Programs menu by consulting the contents of two critical folders:

• **Documents and Settings→All Users→Start Menu→Programs folder.** This folder contains shortcuts for programs that are available to everybody who has an account on your machine (Chapter 17).

• **Documents and Settings→[Your Name]→Start Menu→Programs folder.** In this folder, you'll find shortcuts for the programs that *you* have added to the Start menu—and they appear only when *you* have logged into the machine.

Figure 1-25 shows you these two locations in Windows Explorer.

In other words, instead of the fancy icon-adding wizards and drag-and-drop schemes described earlier, you may prefer to fine-tune your Start menu the low-tech way. Just open the relevant Start Menu folder. (Right-click the Start button; from the shortcut menu, choose either Open All Users [to view the list of programs for the masses] or Open [to see the list of your personal programs.]) You can add shortcut icons to, remove them from, or rename them in your Start→All Programs menu just by manipulating the shortcuts in this folder.

Removing Icons from the Start Menu

When it comes time to prune an overgrown Start menu, there are three different sets of instructions, depending on which section of the Start menu needs purging.

- **The lower-left section.** Right-click the item you've targeted for extinction, and then choose "Remove from This List" from the shortcut menu.

- **The right-hand column.** Right-click the Start button; choose Properties from the shortcut menu; click Customize; click the Advanced tab, scroll down, and turn off the checkboxes for the items you want expunged.

Note: If you're using the Classic Start menu view, right-click the Start button; choose Properties; click Customize; and then turn off the checkboxes in the "Advanced Start menu options" list box.

- **The "free" areas.** (This means the upper-left section and the All Programs list.) You can ditch items from these areas just by *dragging* them off the menu—onto the desktop, for example, or even directly onto the Recycle Bin icon.

  Or, if you prefer, just right-click the file, folder, program, or disk name in the All Programs menu, and then choose Delete from the shortcut menu. It disappears instantly. To remove items from the upper-left section, right-click on the item, and then choose "Remove from This List" from the shortcut menu.

  In both cases, you're only deleting the *shortcut* that appears on the menu. Deleting items from the Start menu doesn't actually uninstall any software.

Renaming Start Menu Items

Not many people are aware that they can change the Fisher-Price naming conventions of Windows (My Documents, My Pictures, My First Operating System...).

In fact, you can rename anything you choose in the Start menu—and not just in the free areas. Click the Start menu to open it, right-click the command you want to rename, and choose Rename from the shortcut menu. The name of the command—even My Documents or My Computer—sprouts a little editing box. Type the new name and then press Enter.

Reorganizing the Start Menu

To change the order of listings in the "free" portions of the Start menu, just drag the commands up and down the lists as you see fit. As you drag an item, a black line ap-

pears to show you the resulting location of your dragging action. Release the mouse when the black line is where you want the relocated icon to appear.

Tip: If you change your mind while you're dragging, press the Esc key to leave everything as it was.
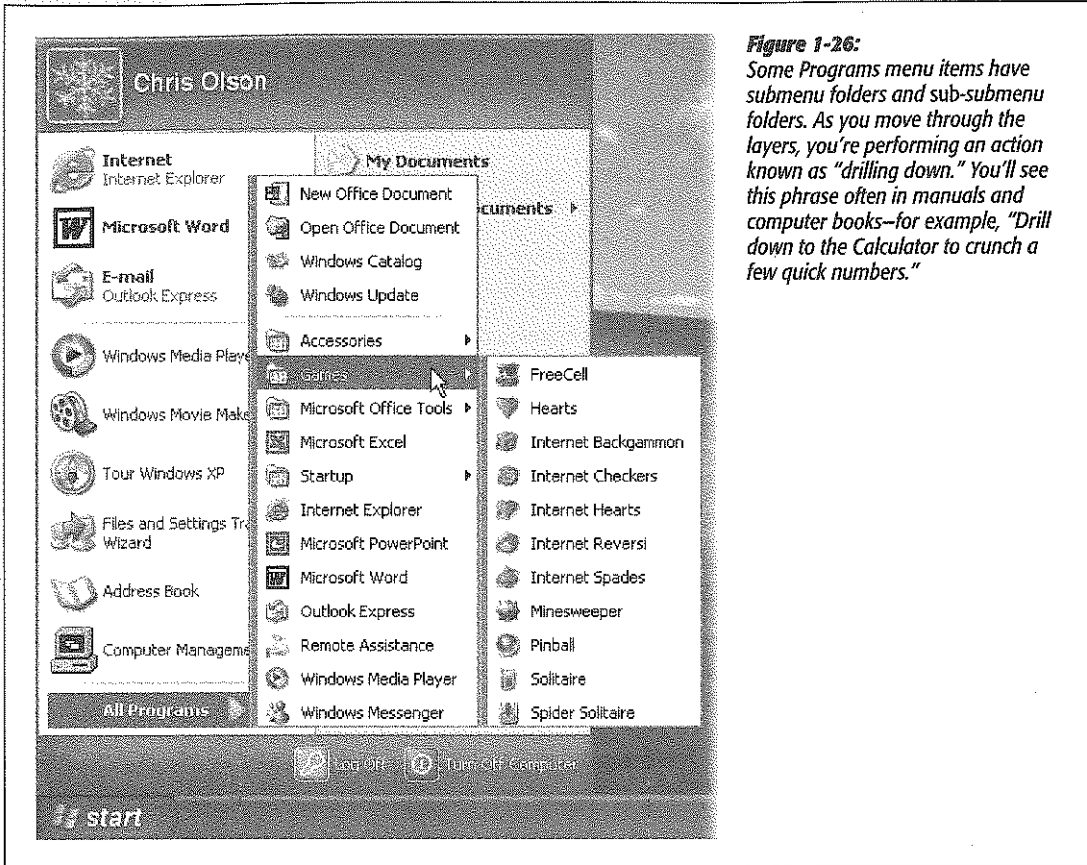
Figure 1-26:
Some Programs menu items have submenu folders and sub-submenu folders. As you move through the layers, you're performing an action known as "drilling down." You'll see this phrase often in manuals and computer books--for example, "Drill down to the Calculator to crunch a few quick numbers."

You can drag program names from the lower-left section of the Start menu, too—but only into one of the "free" areas.

Add folders to hold submenus

Start menu listings accompanied by a right-facing triangle arrow represent folders. For example, clicking Start→All Programs→Games reveals a submenu that lists all the games that come with Windows (see Figure 1-26).

Without these folders consolidating the All Programs menu, you'd need one of those very expensive 95-inch monitors to see the entire list of applications. Fortunately, you can create Programs menu folders of your own and stock them with whatever icons

you like. For instance, you may want to create a folder for CD-ROM-based games, eliminating those long lists from the All Programs menu.

To add a folder to the All Programs menu, follow these steps:

1. **Open the Start menu. Right-click All Programs. From the shortcut menu, choose Explore.**

   The subfolders you are about to create in the All Programs menu will show up only when *you* are logged on. (If you want to make a change that affects *everybody* with an account on this computer, choose Explore All Users from the shortcut menu instead.)

Figure 1-27:
The listings on the All Programs menu appear in the right pane. Notice that some of the items have folder icons; these are the folders that hold sub-menus. If you click Programs (in the left pane) before creating the new folder, you'll create a folder within the body of the All Programs list. To add a folder whose name will appear above the line in the All Programs menu, click Start Menu (in the left pane) before creating a new folder.
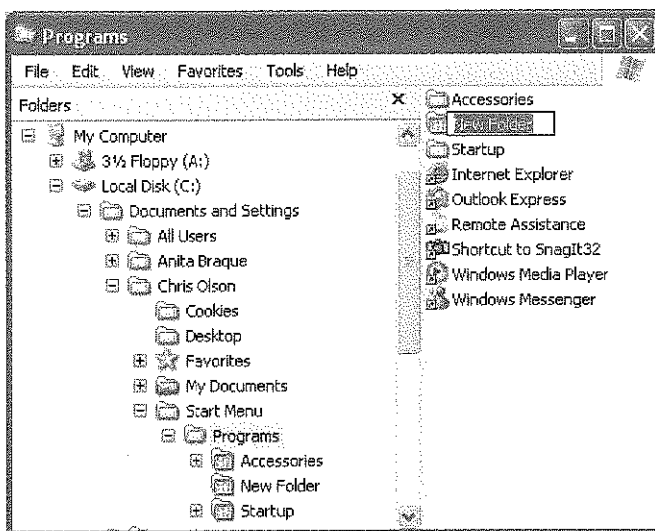
In any case, the Start Menu Explorer window appears.

2. **Click the Programs folder.**

   Its contents are listed in the right pane, as shown in Figure 1-27.

3. **Choose File→New→Folder.**

   Or, if your right mouse button hasn't been getting enough exercise, right-click a blank spot in the right pane, and then choose New→Folder from the shortcut menu.

4. **When the new folder item appears, type a folder name and then press Enter.**

   Close the Start Menu window, if you like.

Your new folder appears at the bottom of the Start→All Programs menu. Feel free to drag your new folder up or down on the menu.

Now you can put your favorite file, folder, disk, or application icons *into* this new folder. To do so, drag an icon onto the Start→All Programs menu, and then, without releasing the mouse, onto the new folder/submenu you created. Of course, the first time you do this, your newly created folder submenu just says "Empty"; drag the icon onto that "Empty" notation to install it into your submenu. Then drag as many other icons as you like into this new folder.

You can even create folders *within* folders in your Start→All Programs menu. Just repeat the instructions given earlier—but following step 2, click the + sign next to the first folder you added. Then continue with step 3.

Windows, Folders, and the Taskbar

Windows got its name from the rectangles on the screen—the windows—where every computer activity takes place. You look at a Web page in a window, type into a window, read email in a window, and look at the contents of a folder in a window—sometimes all at once. But as you create more files, stash them in more folders, and launch more programs, it's easy to wind up paralyzed before a screen awash with cluttered, overlapping rectangles.

Fortunately, Windows is crawling with icons, buttons, and other inventions to help you keep these windows under control.

Windows in Windows

There are two categories of windows in Windows:

- Desktop windows. These windows, sometimes called Windows Explorer windows, include the windows that open when you double-click a disk or folder icon. This is where you organize your files and programs.

- Application windows. These are the windows where you do your work—in Word or Internet Explorer, for example.

Nonetheless, all windows have certain components in common (see Figure 2-1).

- Title bar. This top strip displays the name of the window. Drag it like a handle when you want to *move* the window on the screen.

• **Minimize button.** Click this box to temporarily hide a window, shrinking it down into the form of a button on your taskbar (page 92). You can open it again by clicking that button. *Keyboard shortcut:* Press Alt+Space bar, then N.

• **Maximize button.** Click this button to enlarge the window so that it fills the screen, gluing its edges to the screen borders. At this point, the maximize button turns into a *restore down* button (whose icon shows two overlapping rectangles), which you can click to return the window to its previous size. *Keyboard shortcut:* Press Alt+Space bar, then X.

Tip: You can also maximize or restore a window by double-clicking its title bar.
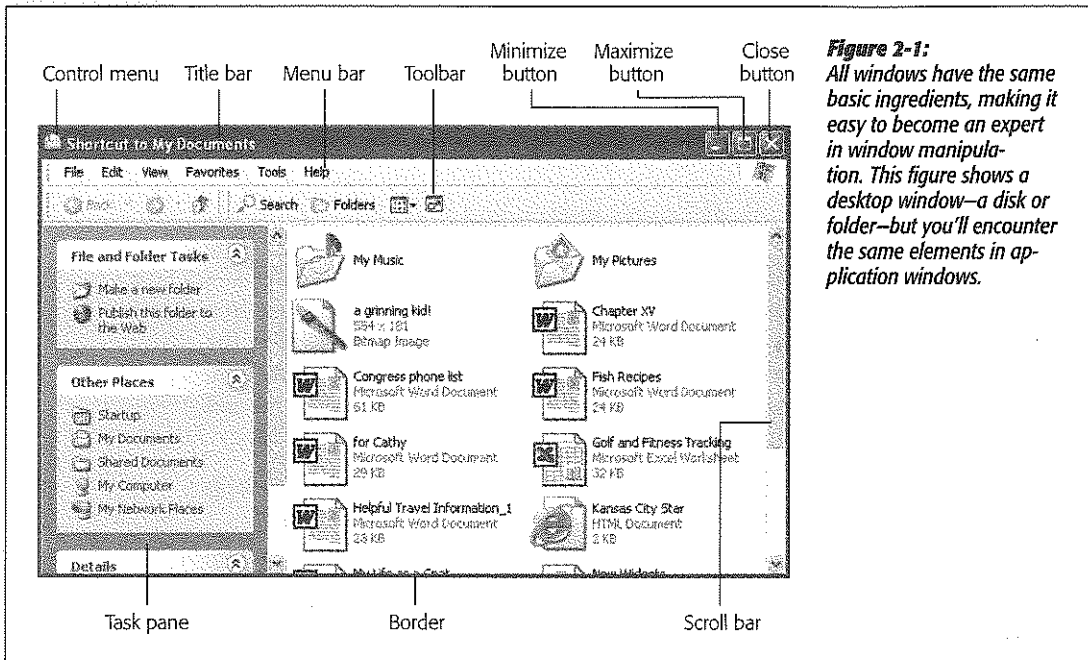
Figure 2-1:
All windows have the same basic ingredients, making it easy to become an expert in window manipulation. This figure shows a desktop window—a disk or folder—but you'll encounter the same elements in application windows.

• **Close button.** Click the X button to close the window. *Keyboard shortcut:* Press Alt+F4.

• **Menu bar.** Click a menu title (such as File or Edit) to open a menu, revealing a list of commands available for that menu in this window. *Keyboard shortcuts:* Press Alt+[underlined letter in menu], or press F10 to activate the menu bar in the active window and *then* press the underlined letter.

• **Toolbar.** Some windows offer rows of one-click shortcut buttons as equivalents for the menu commands that Microsoft thinks you'll use frequently. (More on toolbars at the end of this chapter.)

HP Inc. - Exhibit 1007 - Page 84

- **Scroll bar.** A scroll bar appears on the right side or bottom of the window if the window isn't large enough to show all its contents (as described in the box at the bottom of this page).

- **Address bar.** This bar lets you type in a Web address or the address of a folder on your PC; when you press Enter or click Go, that Web page (or a list of the contents of that folder) appears.

- **Control icon.** The icon next to the title is actually a menu that offers commands for sizing, moving, and closing the window. You can double-click it to close a window. Otherwise, it's not very useful, because its commands duplicate the other doodads described here.

- **Borders.** You can change the size of a window by dragging these edges. Position your pointer over any border until the pointer turns into a double-headed arrow. Then drag inward or outward to reshape the window. (To resize a full-screen window, click the restore down button first.)

Tip: You can resize a window in both dimensions at once just by dragging one of its corners. The diagonally striped ribs at the lower-right corner may suggest that it's the *only* corner you can drag, but it's not; all four corners work the same way.

The Task Pane

At the left side of every desktop window is a special, independent blue panel. For novices in particular, it's one of the most useful new features in Windows XP.

The programmers at Microsoft were clearly frustrated at having built so many interesting features into Windows that nobody knew existed. Most of these features appeared only when you right-clicked something—a folder, file, or whatever. But by Microsoft's

UP TO SPEED

Scroll Bar Crash Course

Scroll bars are the strips that may appear at the right side or bottom of a window. The scroll bar signals you that the window isn't big enough to reveal all of its contents.

Click the arrows at each end of a scroll bar to move slowly through the window, or drag the square handle (the *thumb*) to move faster. (The position of the thumb relative to the entire scroll bar reflects your relative position in the entire window or document.) You can quickly move to a specific part of the window by holding the mouse button down on the scroll bar where you want the thumb to be. The scroll bar rapidly scrolls to the desired location and then stops.

If your mouse has a little wheel on the top, you can scroll (in most programs) just by turning the wheel with your finger, even if your cursor is nowhere near the scroll bar. You can turbo-scroll by dragging the mouse upward or downward while keeping the wheel pressed down inside the window.

Finally, keyboard addicts should note that you can scroll without using the mouse at all. Press the Page Up or Page Down keys to scroll the window by one "windowful," or use the up and down arrow keys to scroll one line at a time.

research, as many as 75 percent of Windows users never right-click *anything*. They've been missing out on all of these features.

The idea behind the *task pane,* therefore, is to unearth the list of features that once lurked (and still lurk) inside shortcut menus. The contents of this blue panel change depending on the kind of window you're viewing (Figure 2-2), but the idea is always the same: to wave a frantic little software flag in front of your eyes, so that you'll notice some of the possibilities that are only a click away.

In a standard desktop window, for example, the task pane lists frequently sought commands like "Make a new folder," "Publish this folder to the Web," and "Share this
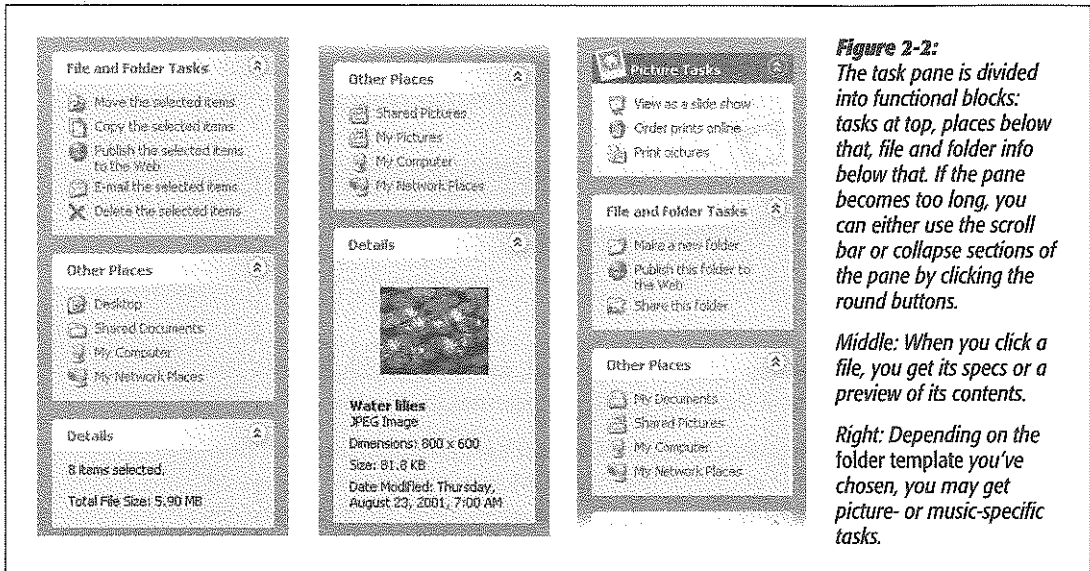
Figure 2-2:
The task pane is divided into functional blocks: tasks at top, places below that, file and folder info below that. If the pane becomes too long, you can either use the scroll bar or collapse sections of the pane by clicking the round buttons.

Middle: When you click a file, you get its specs or a preview of its contents.

Right: Depending on the folder template you've chosen, you may get picture- or music-specific tasks.

NOSTALGIA CORNER

Hiding and Shrinking the Task Pane

The task pane is plenty useful for plenty of people, but it's a glutton for screen space. It adds a two-inch sidecar onto every window, which you can't hide or show on a folder-by-folder basis—and can't make narrower.

When window space is tight, you can eliminate the task pane in either of two ways. First, note that Windows politely removes the pane altogether when the window becomes so narrow that half of it would be the task pane. Try dragging the right edge of a window slowly to the left; eventually, you'll see the task pane blink out of sight. (Widen the window

again to make it reappear.)

Second, you can get rid of the task pane on a computer-wide basis. In any folder window, choose Tools→Folder Options. In the resulting dialog box, click "Use Windows Classic folders" and then click OK.

Now the task panes are gone—at least until you return to the same Folder Options dialog box and click "Show common tasks and folders" to make them return.

folder" (with other people on your office network). Below that list of File and Folder Tasks is a box (Other Places) that offers one-click links to frequently accessed locations on your PC: My Computer, My Network Places, and so on.

Finally, at the bottom of every desktop task pane is a Details area. If you click a file icon, this panel displays its size, name, type, modification date, and (if it's a picture) dimensions. If you click a disk icon, you're able to see how full it is and how much it holds. If you select several icons at once, this panel shows you the sum of their file sizes—a great feature when you're burning a CD, for example, and don't want to exceed the 650 MB limit.

Depending on the *template* that's been applied to a folder (page 79), you may also see special multimedia task links: "View as a slideshow" and "Print this picture" for graphics files, "Play All" and "Shop for music online" for music folders, and so on. (Chapter 7 details these topics.)

The Explorer Bar

The new task pane occupies the space at the left side of a window, exactly where the Explorer bar appeared in previous versions of Windows.

But the Explorer bar is still available. By using the View→Explorer Bar command, you can make the task pane disappear, to be replaced by your choice of the following kinds of information:

- **Search.** By choosing View→Explorer Bar→Search, you bring up the Windows XP Search program described in Chapter 1. *Keyboard shortcut:* Ctrl+E, or F3.

- **Favorites.** As you might guess, this list offers quick access to your "bookmarked" Web sites from Internet Explorer. But it can also list folder windows, documents, and other icons to which you'd like easy access. (You can also access your Favorites from the Start menu.) *Keyboard shortcut:* Ctrl+I.

  To add a certain window to this list—My Documents, for example—open it on the screen and then choose Favorites→Add to Favorites (or press Alt+A, A). Name the window, if you like, and then click OK.

  Or, to add an icon (file, folder, disk) to the list of Favorites, just drag it directly into the Favorites bar. Now it's listed in your Favorites menu and in your Favorites bar.

- **Media.** This panel, new in Windows XP, offers a set of controls for playing music CDs, music files, and movie files, right there in your folder window. Of course, Windows Media Player (Chapter 7) is the galactic headquarters for this kind of task. But if you just want to play an MP3 file as background music for your work, this is a great shortcut (see Figure 2-3).

- **History.** This panel works exactly like the one in a Web browser, in that it shows you a list of Web sites you've recently visited, sorted by the date of the visit ("2 Weeks Ago," for example). *Keyboard shortcut:* Ctrl+H.

Tip: Many people miss the fact that the History panel also contains a handy recent-*documents* tracker, one that's even more complete and permanent than the My Recent Documents folder described on page 55. To see the list of documents you've recently opened—including your own files, Help files, and so on—just click the My Computer icon in the history list. (If you opened a document on another machine across the network, click its name instead.)
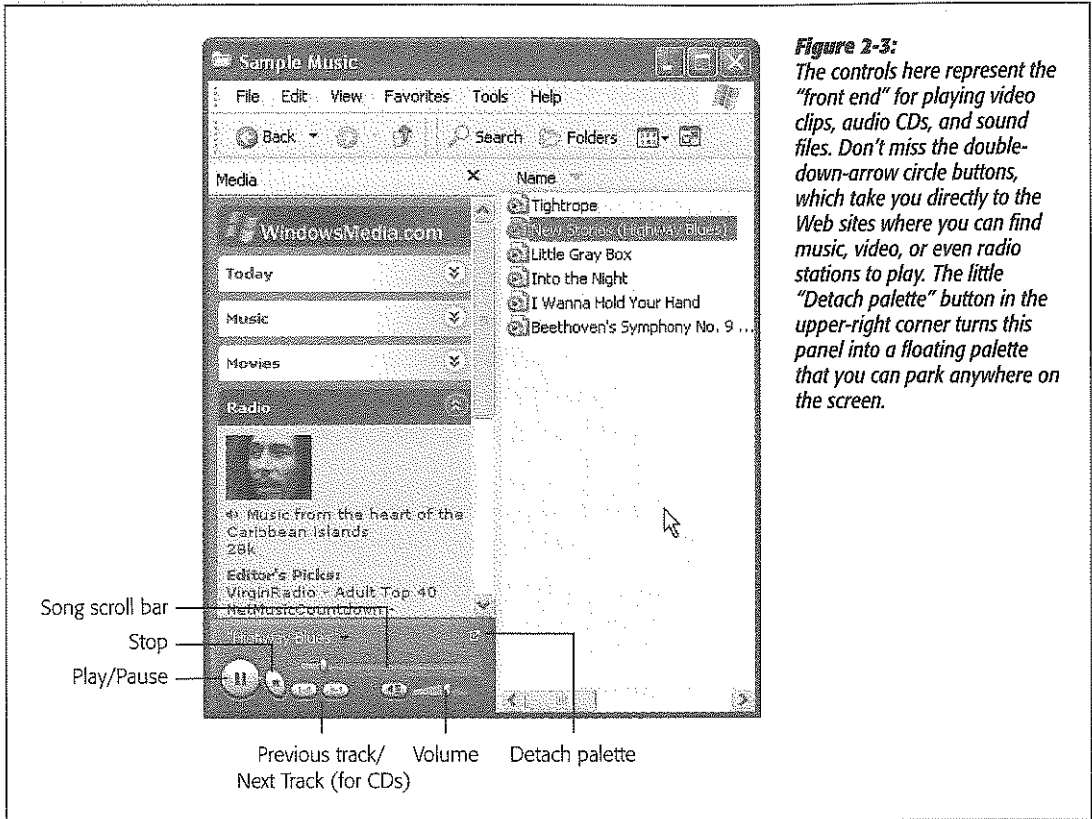
Figure 2-3:
The controls here represent the "front end" for playing video clips, audio CDs, and sound files. Don't miss the double-down-arrow circle buttons, which take you directly to the Web sites where you can find music, video, or even radio stations to play. The little "Detach palette" button in the upper-right corner turns this panel into a floating palette that you can park anywhere on the screen.

Song scroll bar

Stop

Play/Pause

Previous track/   Volume   Detach palette
Next Track (for CDs)

• **Folders.** Choosing View→Explorer Bar→Folders (or simply clicking the Folders button on the standard window toolbar) opens the Windows Explorer–like folder tree that's described on page 112.

• **Tip of the Day.** This option actually has nothing to do with the left-side panel of a window. Instead, it opens a new strip at the *bottom* of the window, displaying a useful tip or trick for using Windows. (Any other Explorer bar panel you've opened at the left side of the window stays right where it is.)

• **Discuss.** This option is worthless unless an administrator has set up a SharePoint Portal Server (a corporate software kit that permits chat sessions among employees). If so, you can use this panel to control which discussion group you sign up for, or to insert fragments of your chat into a document you're working on.

Sizing, Moving, and Closing Windows

Any Windows window can cycle among three altered states:

- Maximized means that the window fills the screen. Its edges are glued to the boundaries of your monitor, and you can't see anything behind it. It expands to this size when you click its maximize button (see Figure 2-1)—an ideal arrangement when you're surfing the Web or working on a document for hours at a stretch, since the largest possible window means the least possible scrolling.

Tip: When a window is maximized, you can *restore* it (as described below) by pressing Alt+Space bar, then R.

- When you click a window's **minimize** button (Figure 2-1), the window disappears. It hasn't actually closed, however; it's simply reincarnated as a button on the taskbar at the bottom of the screen. You can bring the window back by clicking this taskbar button, which bears the window's name. Minimizing a window is a great tactic when you want to see what's in the window behind it.

- A **restored** window is neither maximized nor minimized. It's a loose cannon, floating around on your screen as an independent rectangle. Because its edges aren't attached to the walls of your monitor, you can make it any size you like by dragging its borders.

Tip: Double-clicking the title bar alternates a window between its maximized (full-screen) and restored conditions.

Moving a window

Moving a window is easy—just drag the title bar.

Most of the time, you move a window to get it out of the way when you're trying to see what's *behind* it. However, moving windows around is also handy if you're moving or copying data between programs, or moving or copying files between drives or folders, as shown in Figure 2-4.

Closing a window

You can close a window in any of the following ways:

- Click the close button (the X in the upper-right corner).

- Press Alt+F4.

- Double-click the Control icon in the upper-left corner.

- Single-click the Control icon in the upper-left corner, and then choose Close from the menu.

- Right-click the window's taskbar button, and then choose Close from the shortcut menu.

HP Inc. - Exhibit 1007 - Page 89

- In desktop windows, choose File→Close.

- Quit the program you're using, log off, or shut down the PC.

Be careful: In many programs, including Internet Explorer, closing the window also quits the program entirely.

Tip: If you see *two* X buttons in the upper-right corner of your screen, then you're probably using a program like Microsoft Word. It's what Microsoft calls an MDI, or *multiple document interface* program (see page 76). It gives you a window within a window. The outer window represents the application itself; the inner one represents the particular *document* you're working on.

If you want to close one document before working on another, be careful to click the *inner* Close button. Clicking the outer one exits the application entirely. If you have multiple documents open within one application, you can close the active document by pressing Ctrl+F4. The program *may* ask if you want to save the document before closing it, but nothing is certain, so get in the habit of pressing Ctrl+S before you press Ctrl+F4.
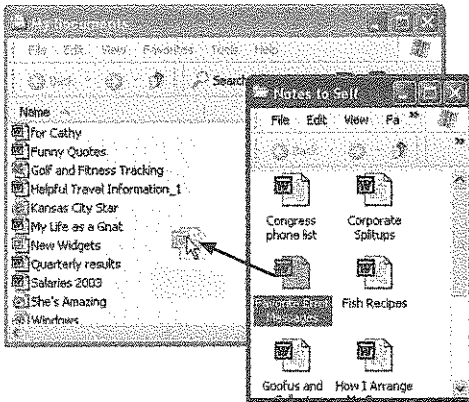
Figure 2-4:
Creating two restored (free-floating) windows is a convenient preparation for copying information between them. Make both windows small and put them side-by-side, scroll if necessary, and then drag some highlighted material from one into the other. This works either with icons in desktop windows (top) or text in Microsoft Word (bottom). If you press Ctrl as you drag text in this way, you copy the original passage instead of moving it.
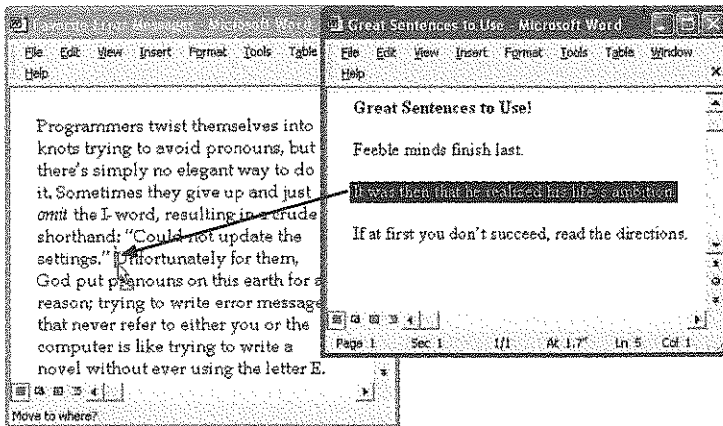
Working with Multiple Windows

Many people routinely keep four or five programs open at once, like a calendar, word processor, Web browser, and email program. Others (computer book authors, for example) regularly work in just one program, but have several document windows open at once, representing several chapters. Clearly, learning how to manage and navigate a flurry of overlapping windows is an essential Windows survival skill.

Active and inactive windows

When you have multiple windows open on your screen, only one window is *active*, which means the following:

- It's in the foreground, *in front* of all other windows.

- It's the window that "hears" your keystrokes and mouse clicks.

- The title bar is vivid blue and the background (inactive) window title bars are a lighter, more faded blue. (You can change this color scheme, as described on page 270.)

Of course, just because a window is in the background doesn't mean that it can't continue with whatever assignment you gave it—printing, downloading email, and so on. If a background program needs to pass a message to you (such as an error message), it automatically pops to the foreground, becoming the active program. When you respond to the message (usually by clicking OK), Windows XP sends the program *back* to the background.

Tip: To activate a background window, click anywhere on it. If other windows are covering up the background window, click its name on the taskbar (described in the next section).

You can also rotate through all the open windows and programs by pressing Alt+Tab. A little panel appears in the center of your screen, filled with the icons of open folders and programs; each press of Alt+Tab highlights the next in sequence. (Alt+*Shift*+Tab moves you one *backward* through the sequence.) Upon releasing the keys, you jump to the highlighted window, as though it's a high-tech game of Duck Duck Goose.

Of course, you won't become a true Zen master of window juggling until you've explored the multiple-window command center itself—the taskbar (see page 92).

The Desktop Window Overhaul

Windows' windows look just fine straight from the factory: all the edges are straight, and the text is perfectly legible. Still, if you're going to stare at this computer screen for half of your waking hours, you may as well investigate some of the ways these windows can be enhanced for better looks and greater efficiency. As it turns out, there's no end to the tweaks Microsoft lets you perform.

Icon and List Views

You can view the files and folders in a desktop window in any of several ways: as small icons, jumbo icons, a tidy list, and so on. Each window remembers its own view settings.

To change the view of a particular open window, choose one of these commands from its View menu (or from the little ⊞▾ icon on the toolbar): Filmstrip, Thumbnails, Tiles, Icons, List, or Details. Figure 2-5 illustrates each of these options.

Some of these views are new in Windows XP. Filmstrip view, for example, is a home run for anyone with a digital camera or scanner. It turns the folder window into a slide show machine, complete with Next and Previous buttons beneath an enlarged picture, as well as buttons that rotate the image on the screen. (You get this view automatically when you open your My Pictures folder.)

Figure 2-5:
The new Filmstrip view (upper left) creates a slide show right in the folder window. Thumbnails view (upper right) is also good for photos—or anyone who would like a larger target for clicking each icon. (Tip: If you press Shift as you switch to Thumbnails view, you hide the file names. Do it again to bring the names back.)

In the new Tiles view (middle left), your icons appear at standard size, sorted alphabetically into vertical columns—with name and file details just to the right. Icons view (middle right) sorts the icons horizontally in rows, displaying only their names. The List view (lower left) packs, by far, the most files into the space of a window. Details view (lower right) is the same as List view, except for the additional columns of information that reveal the size, the icon type, and the date and time the item was last modified.

HP Inc. - Exhibit 1007 - Page 92
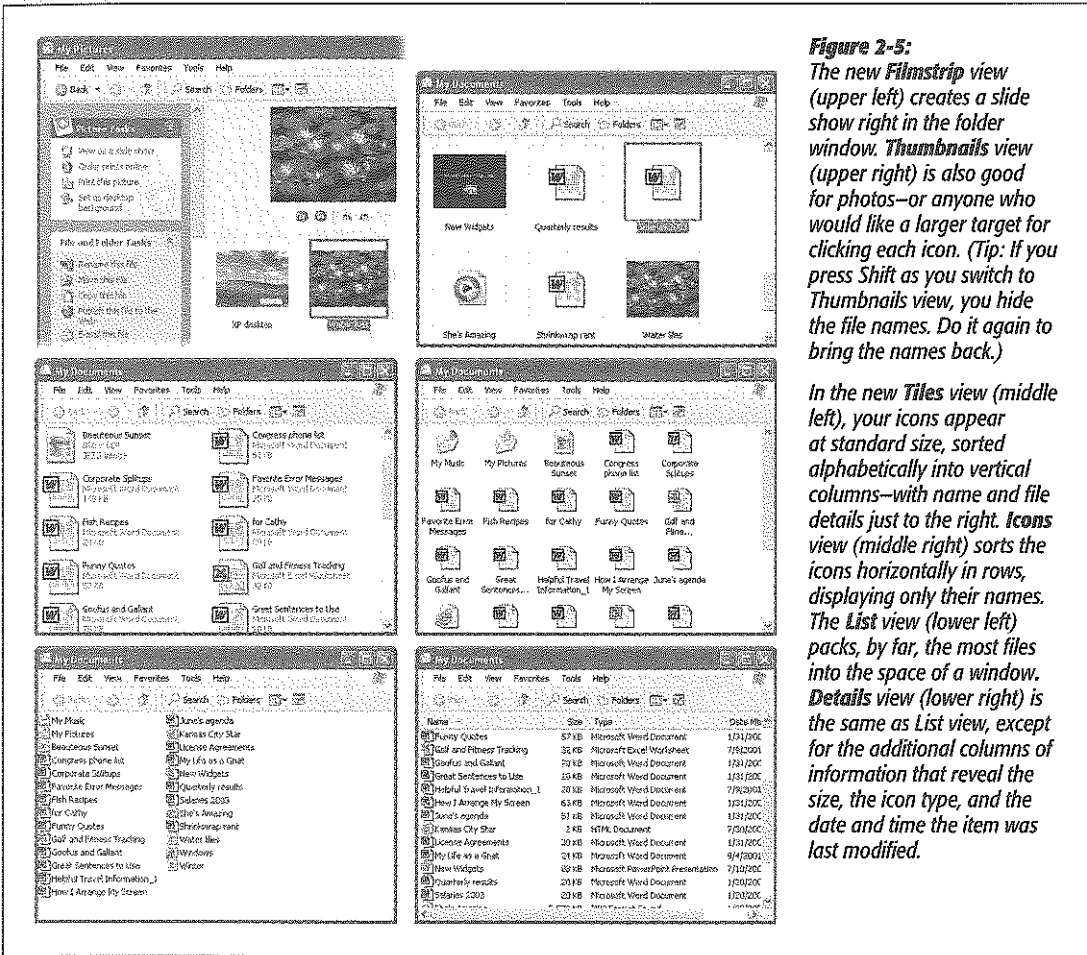
Tip: In Filmstrip view, try right-clicking inside the large image of your photo. The resulting shortcut menu offers a number of very useful options, including Rotate commands, "Set as Desktop Background," and "Send To" (which lets you fire the picture off to somebody by email).

As a message may tell you, rotating certain pictures may force Windows to recompress them, sometimes reducing the quality by a fractional amount. In general, the quality loss isn't visible to the eye, but if you're concerned, duplicate the file to preserve the original before rotating.

Changing the sorting order

Windows XP starts out arranging the icons alphabetically in two different groups. Folders come first, followed by the list of loose files in a second group.

But you don't have to be content with an alphabetical list. Windows XP is wildly flexible in this regard, letting you sort a window's contents in any of 32 ways.

To change the sorting criterion, choose View→Arrange Icons By, and then choose from the drop-down menu. The sorting possibilities listed here depend on which *columns* you've made visible in Details view (described in the next section). Generally, though, you'll find these options:

GEM IN THE ROUGH

Folder Templates

In previous Windows versions, people with too much time on their hands could choose their own HTML templates to dress up the backgrounds of their open folder windows. In XP, if you want the blank area behind your icons to be solid mauve, for example, or decked out with a replica of your home page, you're out of luck.

There is still a Customize This Folder command in the View menu, though. (It's available in the View menu of any folder you've created yourself—just not built-in folders like My Documents.) It produces the dialog box shown here. Using the drop-down menu at the top, you can choose to apply any of seven canned folder templates to the currently open folder.

In the Windows XP sense, *template* here means *predefined*

view setting (thumbnail, filmstrip, or whatever) and set of task pane options. Ever wonder why your My Pictures folder always opens up in Filmstrip view, with useful tasks like "View as a slide show" on the task pane? Now you know: It's been given the Pictures template in this dialog box.
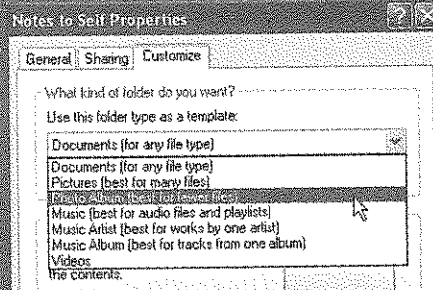
Three of the templates listed here are designed for folders that contain music files (MP3 files and such), one is for documents of any file type, two are for picture folders, and one is for videos. Clearly, Microsoft designed this feature for its own benefit (for the My Pictures and My Music folders, specifically). However, if you create other multimedia folders of your own, you now know how to make them resemble Windows XP's ready-made folders.

Notes to Self Properties

General | Sharing | **Customize**

What kind of folder do you want?
Use this folder type as a template:

Documents (for any file type)

Documents (for any file type)
Pictures (best for many files)
Photo Album (best for fewer files)
Music (best for audio files and playlists)
Music Artist (best for works by one artist)
Music Album (best for tracks from one album)
Videos
the contents.

- **Name** arranges the files alphabetically.

- **Type** arranges the files in the window alphabetically by file *type*, such as Word documents, applications, JPEG files, and so on. (Technically, you're sorting files by their *filename extensions* [see page 169].)

- **Size** arranges files by size, smallest first. (Folders are unaffected; Windows never shows you the sizes of folders in its list views.) In the My Computer window, this option says Total Size and lists your disks by their capacity.

- **Free Space** is an option only in the My Computer window. Needless to say, it shows you how much space is left on each of your disks.

- **Show in Groups** is a fascinating enhancement in Windows XP. In any view except Filmstrip and List, it superimposes *headings* on your sorted list of icons, making the window look like an index (see Figure 2-6). When sorting the list by size, for example, the headings say Tiny, Small, Medium, and Folders. When sorting by modified date, you see headings called Yesterday, Last week, Earlier this month, and so on. It's an inspired idea that makes it much easier to hunt down specific icons in crowded folders.

- **Auto Arrange**, available only in Icon and Tile views, isn't actually a sorting method, it's a straightening-up method. It rearranges the icons so they're equally spaced and neat. (You can use this command on the desktop, too, which is one way to avoid CWDS [Cluttered Windows Desktop Syndrome].)
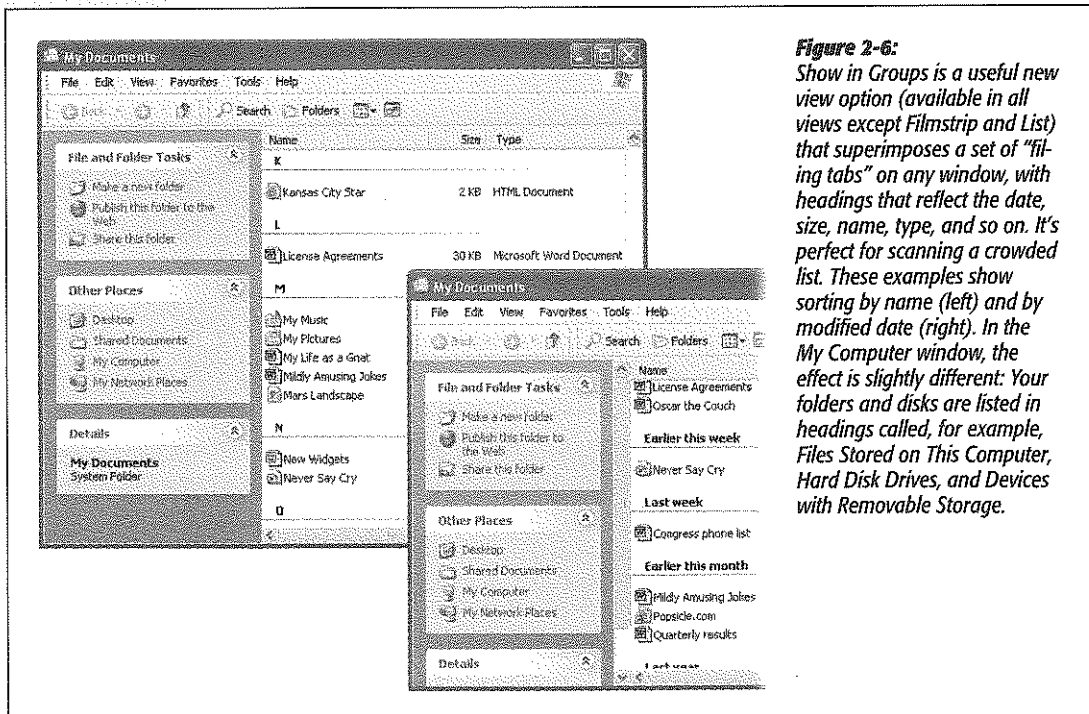
Figure 2-6:
Show in Groups is a useful new view option (available in all views except Filmstrip and List) that superimposes a set of "filing tabs" on any window, with headings that reflect the date, size, name, type, and so on. It's perfect for scanning a crowded list. These examples show sorting by name (left) and by modified date (right). In the My Computer window, the effect is slightly different: Your folders and disks are listed in headings called, for example, Files Stored on This Computer, Hard Disk Drives, and Devices with Removable Storage.

- **Align to Grid** is slightly different. Whereas Auto Arrange always keeps icons or tiles in a tight, equally spaced clump, Align to Grid snaps dragged icons into position against an invisible underlying grid, even if they're scattered across the broad space of an open window (instead of clustered together in the upper-left corner). In other words, this feature is generally useful only when Auto Arrange is turned off.

Note: You can't reverse the sort *order* of your icons (from Z to A, for example), except in Details view, described next.

Manipulating the Details view

You gotta love Details view. Clearly, Microsoft does: it's endowed Details view with much more flexibility and power than the other views.

First, there's the obvious advantage of being able to see the size and date of the objects in neat columns, as shown in Figure 2-5. Second, you can sort the contents by file size, type, or date simply by clicking the appropriate column heading.

Tip: If you click the same column heading again, the sorting order is reversed. For instance, clicking the Date Modified column once places your files into oldest-files-first sequence; a second click puts the *newest* file first. A small arrow on the column heading points up or down to indicate the order of the sort. (This doesn't work if "Arrange in Groups" is turned on.)

Third, you can rearrange the column sequence just by dragging their headings horizontally.

Finally, you can manipulate the columns in a number of ways:

- To add more columns to the window, providing even more information about each icon, right-click any column heading and choose column names from the resulting drop-down menu. As you'll quickly discover, many of these column headings are useful only in folders that contain certain kinds of files—Date Picture Taken is for digital photos, Album Title is for music files, and so on.

- For even more control over the columns, choose View→Choose Details to open the dialog box shown in Figure 2-7. Turn on the checkboxes beside the columns you want. You can even determine their sequence just by clicking a column name, and then clicking Move Up or Move Down (although, as noted above, it's much easier to drag the column headings in the window yourself).

- Once you've opened the Choose Details window, you *could* change the width of a column by editing the number at the bottom in the "Width of selected column (in pixels)" text box—but that's for geeks. It's much more natural to adjust column widths just by dragging the vertical divider bar (between column headings) from side to side.

Tip: When adjusting the width of a column, here's a technique that's even better than dragging: *Double-click* the divider between one column name and the next. Doing so automatically expands the column to a width that's precisely wide enough to reveal the widest item in that column (exactly as in Microsoft Excel).
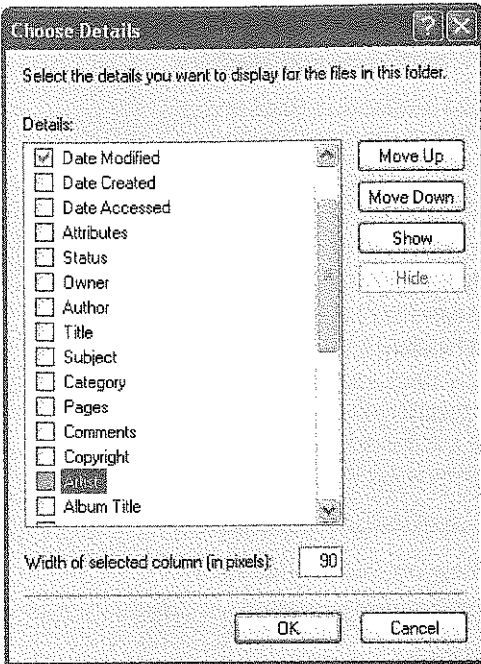
Figure 2-7:
The range of information you can display in the window is robust enough to satisfy even the terminally curious. Some of the characteristics listed here are for specific types of files. For example, you won't need a column for Audio Formations in a folder that holds word processing documents.

Standard Folder Views

Now that you've twiddled and tweaked your system windows into a perfectly efficient configuration, you needn't go through the same exercises for each folder. Windows XP can immortalize your changes as the standard setting for *all* your windows.

Choose Tools→Folder Options→View tab. Click the Apply to All Folders button. When Windows XP asks whether you're sure you know what you're doing, click Yes.

At this point, all of your disk and folder windows open up with the same view, sorting method, and so on. You're still free to override those standard settings on a window-by-window basis, however.

And if you change your mind *again,* seeking to make all of your maverick folder windows snap back into line with the standard settings, choose Tools→Folder Options→ View tab and click the Reset All Folders button.

Uni-Window vs. Multi-Window

When you double-click a folder, Windows can react in one of two ways:

- **It can open a new window.** Now you've got two windows on the screen, overlapping each other. Moving or copying an icon from one into the other is a piece of cake. Trouble is, if your double-clicking craze continues much longer, your screen will eventually be overrun with windows that you must painstakingly close again.

- **It can replace the original window with a new one.** This only-one-window-at-all-times behavior keeps your desktop from becoming crowded with windows. If you need to return to the previous window, the Back button takes you there. Of course, you'll have a harder time dragging icons between windows using this ethod.

To specify your preference, choose Tools→Folder Options→General tab in any desktop window. In the resulting dialog box, click "Open each folder in the same window" or "Open each folder in its own window," as you like. Then click OK.

Tip: You can can reverse this setting on a case-by-case basis by pressing Ctrl as you double-click. If you've selected "in the same window," for example, Ctrl-double-clicking opens a folder into its own window.

The "Folder Options" Options

If you choose Tools→Folder Options from any folder window and then click the View tab (see Figure 2-8), you see an array of options that affect all of the folder windows on your PC. When assessing the impact of these controls, "earth-shattering" isn't the adjective that springs to mind. Still, you may find a few of them useful.

Here are the functions of the various checkboxes:

POWER USERS' CLINIC

Eliminating Double-Clicks

In many ways, each desktop folder window is just like Internet Explorer. It has a Back button at the top, an Address bar strip just below that, a Favorites menu, and so on.

If you enjoy this computer-as-browser effect, you can actually take it one step further. You can set up your PC so that one click, not two, opens an icon. It's a strange effect that some people adore, and others turn off again as fast as their little fingers will let them. Either way, you should try it out.

Choose Tools→Folder Options→General tab. Select "Single-click to open an item (point to select)." When you turn on this option, you can even turn the icon names into underlined links by selecting "Underline icon titles consistent

with my browser" or "Underline icon titles only when I point at them." Click OK.

If a single click opens an icon, you're entitled to wonder: How does one *select* an icon (which you'd normally do with a single click)? Answer: Just point to it for about a half-second, letting the mouse hover over the listing without clicking. To make multiple selections, press the Ctrl key as you point to additional icons.

Of course, the PC-as-Web analogy isn't quite complete—you still won't see advertising banners across the top of your desktop windows. Maybe next year.

• **Automatically search for network folders and printers.** When you turn on this checkbox, Windows explores your network every few seconds in hopes of detecting shared folders and network printers that recently have been turned on or off. That way, your Network Places and Printers windows will be up to date when you open them.
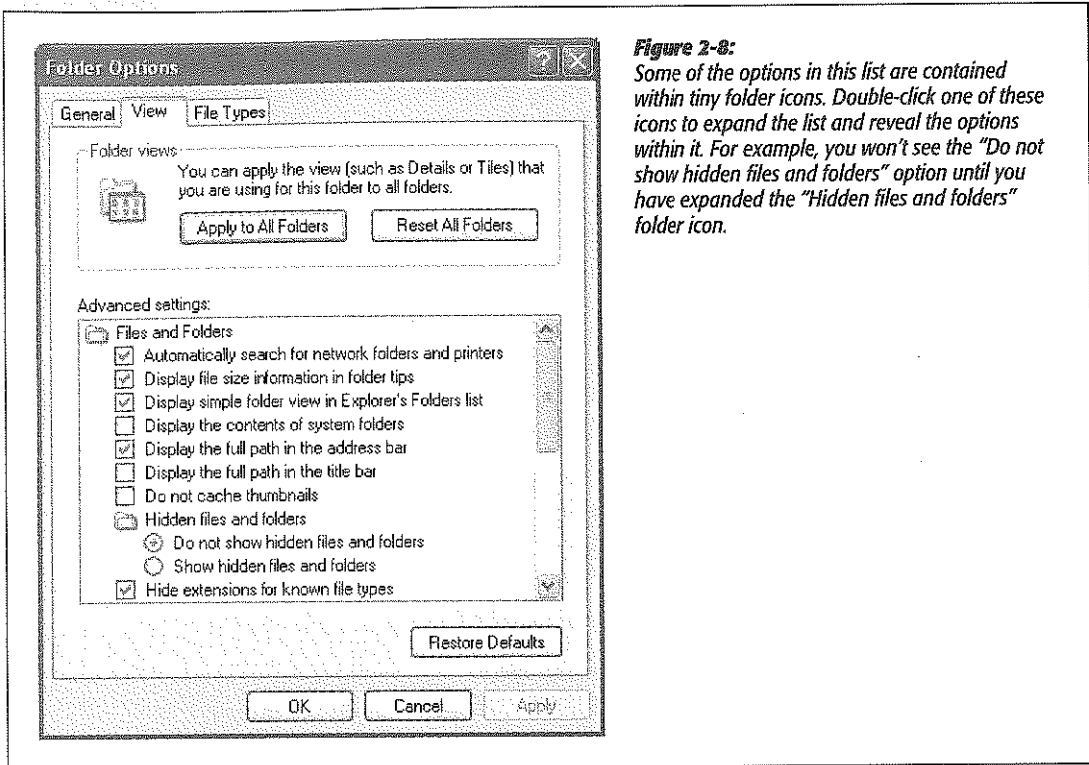
Figure 2-8:
Some of the options in this list are contained within tiny folder icons. Double-click one of these icons to expand the list and reveal the options within it. For example, you won't see the "Do not show hidden files and folders" option until you have expanded the "Hidden files and folders" folder icon.

• **Display file size information in folder tips.** A *folder tip* is a rectangular balloon that appears when you point to a folder—a little yellow box that tells you what's in that folder and how big it is on the disk. (It appears only if you've turned on the "Show pop-up description" checkbox described below.) Talk about tweaky: you turn off *this* checkbox if you want to see the description but not the size.

• **Display simple folder view in Explorer's Folders list.** When you've turned on this option, clicking a folder in Windows Explorer (page 112) expands its listing, showing you its contents. It also simultaneously *closes* any other folder you've previously expanded. (Turning off this option also adds dotted lines that help you see which folders sprang forth from which other folders in the "tree.")

• **Display the contents of system folders.** When you open certain windows that "belong" to Windows XP itself—the Windows folder or Program Files folder, for example—you see nothing but an enormous, full-window message that says,

"These files are hidden." Microsoft grew weary of answering tech-support calls from clueless or mischievous customers who had moved or deleted critical system files from these folders, rendering their PCs crippled or useless. The company concluded that the simplest preventive measure would be to make them invisible (the files, not the PCs).

This checkbox is responsible for that safety feature. If you consider yourself a cool customer when it comes to power-user techniques like fooling around with important Windows folders, you can turn this box on. You won't see that "These files are hidden" message any more. (Of course, even if this checkbox is turned off, you can still view the hidden files by clicking the "Show the contents of this folder" link in the task pane of any such window.)

- **Display the full path in the address bar.** This option displays your window's full folder path in the Address bar (if it's showing)—for example, *C:\Documents and Settings\Chris\My Documents\Bills*—instead of only the folder's name (*Bills*). Turning this option on ensures that you won't get confused on a hard drive that contains two identically named folders. Seeing the path can be useful when you're not sure which disk a folder is on. (See page 35 for more on folder paths.)

- **Display the full path in the title bar.** Same idea, but this time the path of the open folder or file shows up in the *title bar* of the window. Unfortunately, you also get the full path in the window's taskbar button—or more specifically, the first couple words of the path, which usually aren't helpful. In that case, just point to the taskbar button to see the rest of the pathname appear in a tooltip (if "Show pop-up description" is turned on, as described on page 87).

- **Do not cache thumbnails.** This option refers to the new Thumbnails view, a window view that's primarily useful for looking at folders full of pictures. When Windows *caches* such images, it memorizes the little pictures that constitute your thumbnails, so that they'll appear faster the next time you open the window. You save a tiny bit of memory by turning on this checkbox, but you'll wait a lot longer every time you open a folder whose contents are in Thumbnails view.

- **Hidden files and folders; Hide protected operating system files (Recommended).** As noted above, Windows XP hides certain files and information that, if deleted or changed by mistake, could cause you hours of troubleshooting grief by damaging the operating system or your programs. (Certain files and folders remain hidden *even* if you have turned on "Display the contents of System folders.") Yes, Big Brother is watching you, but he means well.

By changing these settings, you, the confident power user, can make the hidden files and folders appear (they'll show up with dimmed icons, as though to reinforce their delicate nature). But you'll have the smoothest possible computing career if you leave these options untouched.

- **Hide extensions for known file types.** Windows XP normally hides the three-letter *filename extension* on standard files and documents (Word files, graphics files, and so on), in an effort to make Windows seem less technical and intimidating. Your

files wind up named Groceries and Frank instead of Groceries.doc and Frank.jpg.

Power users often make these extensions reappear by turning off this option; see page 169 for more on this topic.

- **Launch folder windows in a separate process.** This geekily worded setting opens each folder into a different chunk of memory (RAM). In certain rare situations, this largely obsolete arrangement is more stable—but it slightly slows down your machine and unnecessarily uses memory.

- **Managing pairs of Web pages and folders.** For some reason, this new Windows XP option shows up only if you've also installed Microsoft Office. This feature affects Web pages that you save to your hard drive (by choosing, in Internet Explorer, File→ Save As, and then choosing the "Web Page, Complete" option in the "Save as type" drop-down list). For such a tiny feature, quite a bit of explanation is required.

When saving a Web page in this way, you generally wind up with two separate icons on your desktop: an HTML document that contains the Web page's code (and the words on the page), plus a similarly named folder full of the graphics (and scripts) that appeared on that page.

The "Show and manage the pair as a single file" option here is a strange but useful one. It means that whenever you move or delete *one* of these two icons (the HTML document and the graphics folder), the other one automatically accompanies it. The idea, of course, is to help you avoid breaking the connection between these items—for example, leaving the graphics behind when you copy the text file to another disk.

If you turn on "Show both parts and manage them individually," of course, Windows doesn't preserve any such link. If you drag or delete the text file, you leave behind the graphics folder.

(The strangest option in all of Windows XP is the final one, "Show both parts but manage as a single file." It produces exactly the same effect as "Show and manage the pair as a single file." Go figure.)

- **Remember each folder's view settings.** Ordinarily, every folder and disk window memorizes its own view setting (the sorting order, plus the view setting, like LIst or Details) independently.

But if you turn *off* this checkbox, each folder inherits the view setting of the window it's *in.* If you open My Documents, for example, and switch it to Tiles view, all the folders inside it will open into Tiles view windows, too. Furthermore, if you change one of those inner folders to Details view, for example, it won't stick. Instead, it will switch right back to Tiles the next time you open it.

Tip: A reminder: You can set your PC to employ the same view setting all the time (Details view, for example) by turning on this option and then using the Apply to All Folders button described on page 82.

- **Restore previous folder windows at logon.** Every time you log off the computer, Windows forgets which windows were open. That's a distinct bummer, especially if you tend to work out of your My Documents window, which you must therefore manually reopen every time you fire up the old PC.

  If you turn on this useful checkbox, then each time you log on, Windows XP will automatically present you with whichever windows were open when you last logged off.

- **Show Control Panel in My Computer.** Turn on this checkbox if you'd like to see a Control Panel icon in the My Computer window, as in previous versions of Windows.

- **Show encrypted or compressed NTFS files in color.** This feature won't make much sense until you've read page 472, which explains how Windows XP Professional can encode your files for security, and page 467, which explains how Windows XP (any version) can compact your files to use less disk space.

  This option turns the names of affected icons green and blue, respectively, so that you can spot them at a glance. On the other hand, encrypted or compressed files and folders operate quite normally, immediately converting back to human form when double-clicked. In other words, knowing which ones have been affected isn't particularly valuable. Turn off this box to make them look just like any other files and folders.

- **Show pop-up description for folder and desktop items.** If you point to (but don't click) an icon, a taskbar button, a found item in the Search program, or whatever, you get a pop-up tooltip—a floating yellow label that helps identify what you're pointing to. If you find these tooltips distracting, turn off this checkbox.

- **Use simple file sharing.** See page 591 for details on this simplified, but not especially secure, file-sharing system.

Note: The changes you make in the Folder Options settings are global; they affect *all* desktop windows.

Window Toolbars

On the day it's born, every Windows XP desktop window has a standard *toolbar* across the top (see Figure 2-9). A toolbar is simply a strip of one-click buttons like Back, Forward, Search, and so on.

But by choosing View→Toolbars, or right-clicking a blank spot on a toolbar and pointing to Toolbars on the shortcut menu, you can add or hide whichever toolbars you like, on a window-by-window basis. Three different toolbars are available from the View menu: Standard Buttons, Address Bar, and Links.

HP Inc. - Exhibit 1007 - Page 101

Tip: As anyone in the U.S. Justice Department could probably tell you, the Internet Explorer Web browser is deeply embedded in Windows itself. These window toolbars are perfect examples: They appear not only in desktop windows but also in Internet Explorer when you're browsing the Web. In fact, you'll probably find them even more useful when you're browsing the Web than when browsing your desktop folders.

The Standard Buttons Toolbar

This toolbar helps you navigate your desktop (or the Web). The desktop version contains buttons like these:

- **Back, Forward.** On the Web, these buttons let you return to Web pages you've just seen. At the desktop, they display the contents of a disk or folder you've just seen. If you're using one-window-at-a-time mode (see "Uni-Window vs. Multi-Window" on page 83), these buttons are your sole means of getting around as you burrow through your folders.

Tip: In both Internet Explorer and at the desktop, you can click the tiny down-pointing black triangle on the Back or Forward button to see a drop-down menu of every Web page (or desktop window) you visited on your way to your current position. Similarly, if you point to one of these buttons without clicking, a tooltip indicates which Web site or folder you'll go to if you click.
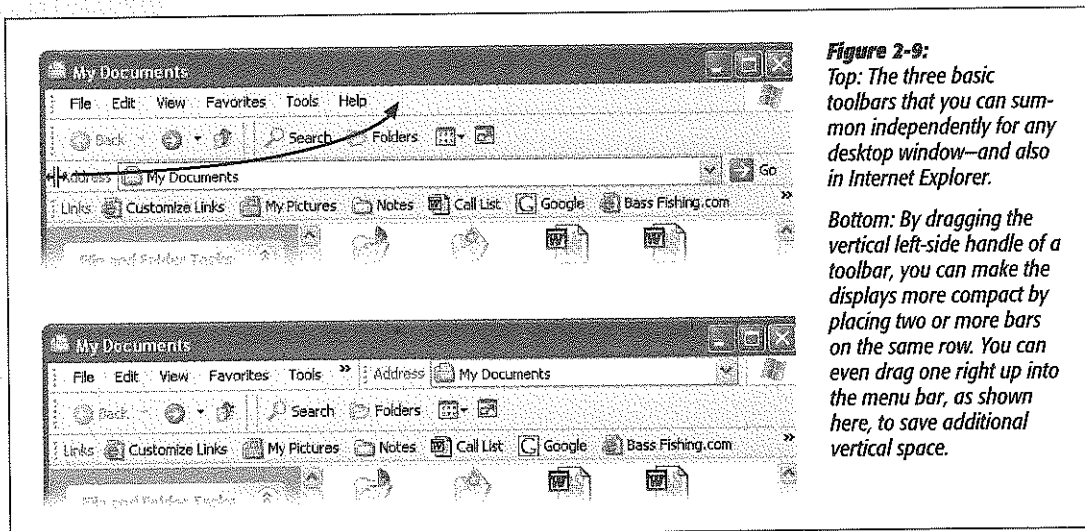
Figure 2-9:
Top: The three basic toolbars that you can summon independently for any desktop window—and also in Internet Explorer.

Bottom: By dragging the vertical left-side handle of a toolbar, you can make the displays more compact by placing two or more bars on the same row. You can even drag one right up into the menu bar, as shown here, to save additional vertical space.

- **Up.** This button, short for "up a level," displays the contents of the folder that *contains* the one you're examining. If you're looking at the contents of, say, the Idaho folder, clicking this button would open the USA folder that contains it.

- **Search.** Opens the Search panel described on page 37. *Keyboard shortcut:* F3.

HP Inc. - Exhibit 1007 - Page 102

- **Folders.** Hides or shows the master map of disks and folders at the left side of the window, re-creating the two-panel Windows Explorer navigational display described in the next chapter.

- **Views.** Opens a short menu listing the different window views: Tiles, Thumbnails, Details, and so on. (In other words, it duplicates the View menu on the menu bar.) For details on these views, see page 78.

These are just the buttons that Microsoft proposes. You're free to add any of several other buttons to the toolbar or delete ones you never use. You can also change the size of these buttons—a useful feature, considering that the factory settings provide fairly porky icons with both pictures and text labels.

To begin the customizing process, right-click a blank spot on the toolbar. Choose Customize from the shortcut menu to open the Customize Toolbar dialog box (Figure 2-10).

Figure 2-10:
The Customize Toolbar dialog box opens in front of the window you were viewing, so you can see the relationship between the window and the dialog box settings. For instance, notice that the right pane of the dialog box lists the current toolbar buttons; the top-to-bottom listing matches the left-to-right arrangement of the toolbar on the window. The Separator is the thin vertical line on the toolbar.
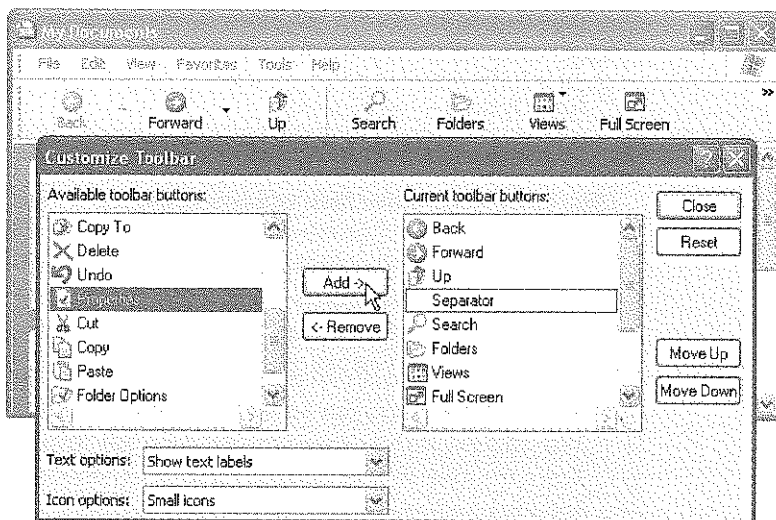
- To remove a button from the toolbar, click its name in the right pane and then click Remove.

- To move a button left or right on the toolbar, just drag its name up or down the right-side list. (Ignore the Move Up and Move Down buttons; they're for suckers who don't know about the dragging trick.)

- To add a button to the toolbar, click it in the left pane and then click Add.

  Here are some of the most useful buttons in the left-side list, for your toolbar-adding consideration. **Properties** saves you a right-click whenever you want to examine an icon's Properties dialog box. **Full Screen** expands the window to fill the entire

HP Inc. - Exhibit 1007 - Page 103

monitor, in the process replacing all of the toolbars with a single, tiny-iconned control strip at the very top of the screen). To recover from Full Screen view, click the (shrunken) Full Screen icon a second time.

Finally, Folder Options opens the dialog box illustrated in Figure 2-8, saving you a couple of menu clicks. This is a great button to have available if you find yourself wanting to make the task pane (page 71) appear and disappear often.

• To add a separator (a vertical divider line) between buttons, click Separator in the left pane and then click Add. Use the Move Up and Move Down buttons at the right of the dialog box to position it.

Each button's text label generally appears to the right of its button instead of underneath, thanks to the Text Options→"Selective text on right" setting. (As is implied by the name, Windows doesn't put a label next to *every* icon—just the ones it likes.) If you prefer, you can choose "Show text labels" (which displays the labels *underneath* the icon buttons), or for the maximum space savings, "No text labels," from this drop-down menu. (There's no way to display *only* labels without the pictures.)

• To put the standard jumbo Windows XP toolbar buttons on a little diet, choose Icon Options→"Small icons."

• To return everything to its Windows XP factory settings, click Reset.

Click Close when you're finished customizing the Standard toolbar.

The Address Bar

In a Web browser, the Address bar is where you type the addresses of the Web sites you want to visit. At the desktop, the Address bar obeys your commands in all kinds of ways. Here's what you can type there (pressing Enter afterward):

• **A Web address.** You can leave off the *http://* portion. Just type the body of the Web address, such as *www.sony.com*, into this strip. When you click Go or press Enter, the icons in your desktop window are replaced by the actual Web page you specified. Suddenly you're in Internet Explorer.

Tip: By pressing Ctrl+Enter, you can surround whatever you've just typed into the Address bar with *http://www.* and *.com.* See Chapter 11 for even more typing shortcuts along these lines.

• **A search phrase.** If you type some text into this strip that isn't obviously a Web address, Windows assumes that you're telling it, "Go online and search for this phrase." From here, it works exactly as though you've used the Internet search feature described on page 49.

• **A folder name.** You can also type one of several important folder names into this strip, such as *My Computer, My Documents, My Music,* and so on. When you click Go or press Enter, that particular folder window opens.

Tip: The little down-arrow button at the right end of the Address bar is very useful, too. It offers a list of the primary locations on your PC (My Computer, My Documents, your hard drives, and so on) for instant location-jumping.

- **A program or path name.** In these regards, the Address bar works just like the Run command described on page 33.

In each case, as soon as you begin to type, a drop-down list of recently visited Web sites, files, or folders appears below the Address bar. Windows XP is trying to save you some typing. If you see what you're looking for, click it with the mouse, or press the down arrow key to highlight the one you want and then press Enter.

Tip: You don't really need the little Go button; pressing Enter is much faster. If you agree, right-click the Go button and then choose Go Button from the shortcut menu (so that the checkmark disappears), thus removing it altogether.

The Links Toolbar

At first glance, you might assume that the purpose of this toolbar is to provide links to your favorite Web sites. And sure enough, that's what it's for—when you're using Internet Explorer.

Although few realize it, you can drag *any icon at all* onto the toolbar—files, folders, disks, programs, or whatever—to turn them into one-click buttons. In short, think of the Links toolbar as a miniature Start menu for places and things you use most often. You can see desktop folders and documents installed there, for example, in Figure 2-9.

To add your own icons, just drag them from the desktop or any folder window directly onto the toolbar, at any time. Here are a few possibilities, just to get your juices flowing:

- Install toolbar icons of the three or four programs you use the most (or a few documents you work on every day). Sure, the Start menu can also serve this purpose, but only the Links toolbar keeps their names in view.

- Install toolbar icons for shared folders on the network. This arrangement saves several steps when you want to connect to them.

- Install toolbar icons of Web sites you visit often, so that you can jump directly to them when you sit down in front of your PC each morning.

You can drag these links around on the toolbar to put them into a different order, or remove a link by dragging it away—directly into the Recycle Bin, if you like. (They're only shortcuts; you're not actually deleting anything important.) To rename something here—a good idea, since horizontal space in this location is so precious—right-click it and choose Rename from the shortcut menu.

Tip: When you're viewing a Web page, dragging a Web link from this toolbar directly into the Address bar takes you to that particular Web page. But when you're viewing a folder window, dragging one of these Web links to the Address bar creates—in whatever desktop window is open—an *Internet shortcut file.* When double-clicked, this special document connects to the Internet and opens the specified Web page.

The Taskbar

The permanent blue stripe across the bottom of your screen is the taskbar, one of the most prominent and important elements of the Windows interface (see Figure 2-11).

Quick Launch toolbar   Window buttons   Notification area
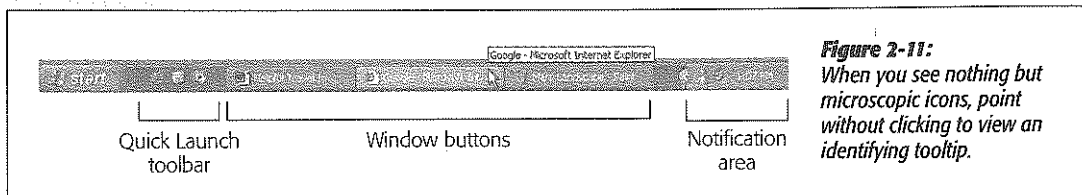
Figure 2-11:
When you see nothing but microscopic icons, point without clicking to view an identifying tooltip.

The taskbar has several segments, each dedicated to an important function. Its right end, the *notification area,* contains little status icons that display the time, whether or not you're online, whether or not your laptop's plugged in, and so on. The main portion of the taskbar, of course, helps you keep your open windows and programs under control. You can even dress up your taskbar with additional little segments called toolbars, as described in the following pages.

This section covers each of these features in turn.

The Notification Area

In Windows XP, Microsoft has chosen a new name for the area formerly known as the tray (the group of tiny icons at the right end of the taskbar): the notification area. (Why use one syllable when eight will do?)

The purpose is much the same: to give you quick access to little status indicators and pop-up menus that control various functions of your PC. Many a software installer inserts its own little icon into this area: fax software, virus software, palmtop synchronization software, and so on.

INFREQUENTLY ASKED QUESTION

The Radio Toolbar

Didn't there used to be another toolbar—the radio toolbar? How am I supposed to tune in my favorite Internet radio stations?

It's gone from Windows XP. When you're in the mood for a little classical music as you crunch numbers, use the new Media Explorer bar panel instead (page 73).

Tip: To figure out what an icon represents, point to it without clicking so that a tooltip appears. To access the controls that accompany it, try both left-clicking and right-clicking the tiny icon. Often, each click produces a different pop-up menu filled with useful controls.

Despite the expansion of its name, you'll probably discover that this area is much smaller than it used to be. On a new PC, for example, you may find little more than the current time.

Tip: By double-clicking the time display, you open the Date and Time Control Panel program. And if you point to the time without clicking, a tooltip appears to tell you the day of the week and today's date.

That's because Microsoft's XP anti-clutter campaign reached a fever pitch when it came to this component of the operating system. The designers of Windows had noticed that software companies large and small had been indiscriminately dumping little icons into this area, sometimes for prestige more than utility.

Therefore, Microsoft laid down two policies concerning this critical piece of screen real estate:

- Even Microsoft's own usual junk—the speaker icon for volume control, the display icon for changing screen resolution, the battery icon for laptops, and so on—is absent on a fresh XP installation. If you want to add these controls to the notification area, you must do it yourself, using the corresponding Control Panel programs as described in Chapter 8.

- Notification area icons that you don't use often will be summarily hidden after a couple of weeks. See Figure 2-12 for details.

Figure 2-12:
If you see a < button, Windows is telling you that it has hidden some of your notification-area icons. Click this button to expand the notification area, bringing all of the hidden icons into view (bottom).

Click here
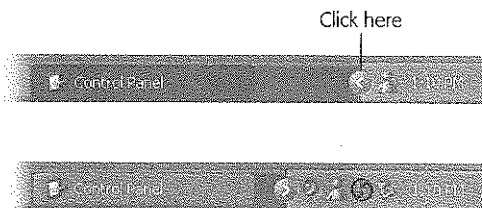
Window Buttons

Every time you open a window, whether at the desktop or in one of your programs, the taskbar sprouts a button bearing that window's name and icon. Buttons make it easy to switch between open programs and windows: Just click one to bring its associated window into the foreground, even if it has been minimized.

The taskbar is the antidote for COWS (Cluttered Overlapping Window Syndrome). In fact, if you work with a lot of windows, you'll run smack into one of the biggest and most visible changes in Windows XP: taskbar button *groups.*

In the old days, opening a lot of windows might produce the relatively useless display of truncated buttons, as illustrated in Figure 2-13. Not only are the buttons too narrow to read the names of the windows, but the buttons appear in chronological order, not software-program order.

The new Windows taskbar does two things that no Windows taskbar has done before. First, when conditions become crowded, it automatically groups the names of open windows into a single menu that sprouts from the corresponding program button, as shown at bottom in Figure 2-13. Click the taskbar button bearing the program's name to produce a pop-up menu of the window names. Now you can jump directly to the one you want.
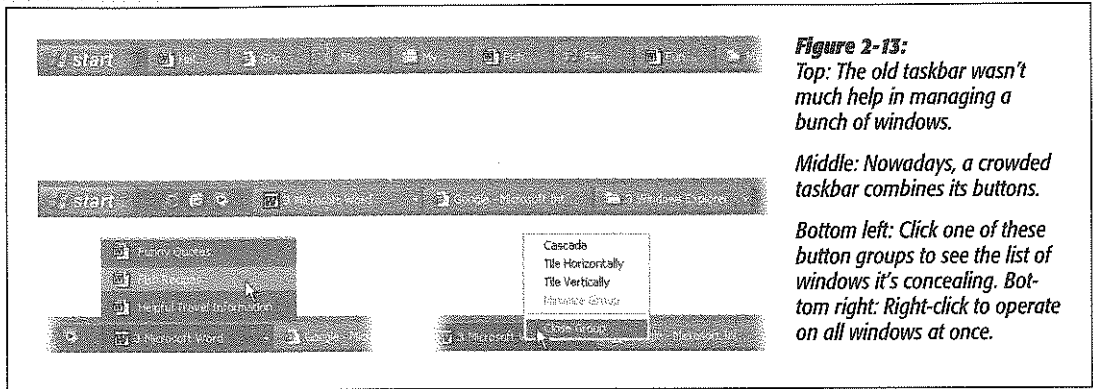
Figure 2-13:
Top: The old taskbar wasn't much help in managing a bunch of windows.

Middle: Nowadays, a crowded taskbar combines its buttons.

Bottom left: Click one of these button groups to see the list of windows it's concealing. Bottom right: Right-click to operate on all windows at once.

Second, even when there is plenty of room, Windows XP aligns the buttons into horizontal groups *by program*. So you'll see all the Word-document buttons appear, followed by all the Excel-document buttons, and so on.

NOSTALGIA CORNER

Turning Off Notification Area Auto-Hiding

In general, the temporary removal of notification area icons you haven't used in a while is a noble ambition. Most of the time, you truly won't miss any invisible icons, and their absence will make the icons you *do* use stand out all the more.

Still, you can tell Windows to leave your tray alone—to leave every notification area icon in full view all the time. To do so, right-click a blank area of the taskbar; from the drop-down menu, choose Properties. At the bottom of the resulting
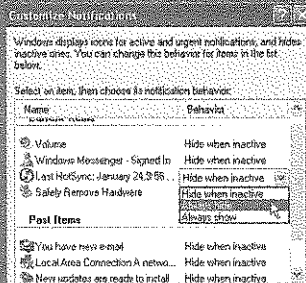
dialog box, turn off the "Hide inactive icons" checkbox, and click OK.

If that seems a little drastic, don't miss the Customize button just to the right of that checkbox. It opens a list of every tray icon that would normally appear, if it weren't for Windows XP's efforts. Click in the Behavior column to produce a pop-up menu for each item. Choose the status you want for each individual tray icon: "Hide when inactive," "Always hide," and "Always show." Finally, click OK.

Despite these dramatic changes, most of the following time-honored basics still apply:

- To bring a window to the foreground, making it the active window, click its button on the taskbar. (If clicking a button doesn't bring a window forward, it's because Windows has combined several open windows into a single button. Just click the corresponding program's button as though it's a menu, and then choose the specific window you want from the resulting list, as shown in Figure 2-13.)

- To *hide* an active window that's before you on the screen, click its taskbar button—a great feature that a lot of PC fans miss. (To hide a background window, click its taskbar button *twice:* once to bring the window forward, again to hide it.)

- To minimize, maximize, restore, or close a window, even if you can't see it on the screen, right-click its button on the taskbar and choose the appropriate command from the shortcut menu (Figure 2-13, bottom). It's a real timesaver to close a window without first bringing it into the foreground. (You can still right-click a window's name when it appears in one of the consolidated taskbar menus described earlier.)

- To arrange all visible windows in an overlapping pattern as shown in Figure 2-14, right-click a blank spot on the taskbar and choose Cascade Windows from the shortcut menu.

- To arrange all non-minimized windows in neat little boxes, each getting an equal rectangular chunk of your screen, right-click a blank spot on the taskbar and choose Tile Windows Vertically or Tile Windows Horizontally from the shortcut menu.

Figure 2-14:
When you've cascaded your windows, click any title bar to bring its window to the foreground. After you've clicked a few title bars and worked in several windows, you'll need to choose Cascade Windows again to rearrange all your open windows. (By right-clicking a consolidated taskbar button, you can cascade only the windows of one program. If you want to cascade all windows of all programs, right-click a blank part of the taskbar.)
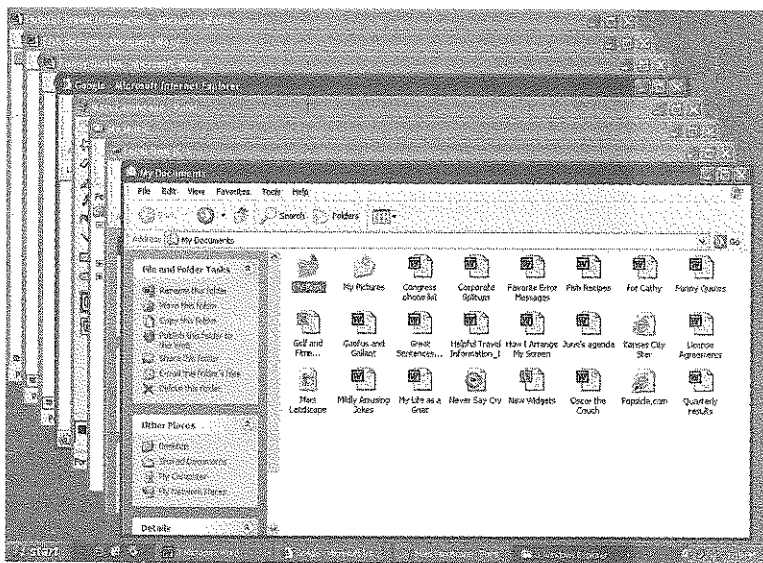
- To minimize all the windows in one fell swoop, right-click a blank spot on the taskbar and choose Show the Desktop from the shortcut menu—or just press the Windows logo key+D.

Tip: When the taskbar is crowded with buttons, it may not be easy to find a blank spot to click. Usually there's a little gap near the right end. You can make it easier to find some blank space by *enlarging* the taskbar, as described on the facing page.

- If you change your mind, the taskbar shortcut menu always includes an Undo command for the last taskbar command you invoked. (Its wording changes to reflect your most recent action—"Undo Minimize All," for example.)

- To close the windows from different programs all at once, Ctrl-click their taskbar buttons to select them. Then right-click the last one you clicked, and choose Close Group from the shortcut menu.

The Quick Launch Toolbar

At the left end of the taskbar—just to the right of the Start button—is a handful of tiny, unlabeled icons. This is the Quick Launch toolbar, one of the most useful features in Windows. See page 99 for details on this and other toolbars.

Customizing the Taskbar

You're not stuck with the taskbar exactly as it came from Microsoft. You can resize it, move it, or hide it completely. Most people don't bother, but it's always good to know what options you have.

Moving the taskbar

You can move the taskbar to the top of your monitor, or, if you're a true rebel, to either side.

To do so, first ensure that the toolbar isn't *locked* (which means that you can't move or resize the taskbar—or any of its toolbars, for that matter). Right-click a blank spot on the taskbar to produce the taskbar shortcut menu. If "Lock the taskbar" is checked, select it to make the checkmark disappear.

NOSTALGIA CORNER

Bringing Back the Old Taskbar

The new taskbar's tendency to consolidate the names of document windows into a single program button saves space, for sure.

Even so, it's not inconceivable that you might prefer the old system. For example, once Windows stacks the names of your documents, you no longer can bring a certain application to the front just by clicking its taskbar button. (You must actually choose from its menu, which is a lot more effort.)

To make Windows XP display the taskbar the way it used to, right-click an empty area of the taskbar and choose Properties from the shortcut menu. Turn off the "Group similar taskbar buttons" checkbox and then click OK.

Now you can drag the taskbar to any edge of the screen, using any blank spot in the central section as a handle. Release the mouse when the taskbar leaps to the edge you've indicated with the cursor.

When the taskbar is on the left or right edge of the screen, Windows XP widens it automatically so that you can read the button names, which remain horizontal. (Ergonomic studies have indicated that keeping your neck bent at a 90 degree angle to read vertical buttons isn't so hot for your spine.)

Tip: No matter which edge of the screen holds your taskbar, your programs are generally smart enough to adjust their own windows as necessary. In other words, your Word document will shift sideways so that it doesn't overlap the taskbar that you've dragged to the side of the screen.

Resizing the taskbar

Even with the new button-grouping feature, the taskbar can still accumulate a lot of buttons and icons. As a result, you may want to enlarge the taskbar to see what's what.

Begin by making sure that the taskbar isn't locked, as described earlier. Then position your pointer on the inside edge of the taskbar (the edge closest to the desktop). When the pointer turns into a double-headed arrow, drag toward the desktop (to enlarge the taskbar) or toward the edge of your monitor (to minimize it).

Note: If you're resizing a taskbar that's on the top or bottom of the screen, the taskbar automatically changes its size in full taskbar-height increments. You can't fine-tune the height; you can only double or triple it, for example.

If it's on the left or right edge of your screen, however, you can resize the taskbar freely.

Hiding the taskbar

If you're working on a smallish monitor, you may wish that the taskbar would make itself scarce now and then—like when you're working on a word processing or Web page document that needs every pixel of space you can get.

Fortunately, it's easy to make the taskbar hide itself until you need it. Start by right-clicking a blank spot on the taskbar, and then choose Properties from the shortcut menu. The Taskbar and Start Menu Properties dialog box appears, offering these options:

- **Keep the taskbar on top of other windows.** This option—the factory setting—permits no other window to cover up the taskbar. Your program windows automatically shrink as necessary to accommodate the taskbar's screen bulk. (If you turn off this option, full-screen application windows overlap the taskbar.)

Tip: To open the taskbar when it's not visible, just press Ctrl+Esc, or press the Windows logo key on your keyboard.

- **Auto-hide the taskbar.** This feature makes the taskbar disappear whenever you're not using it—a clever way to devote your entire screen to application windows, and yet have the taskbar at your cursor tip when needed.

When this feature is turned on, the taskbar disappears whenever you click elsewhere, or whenever your cursor moves away from it. Only a thin blue line at the edge of the screen indicates that you have a taskbar at all. As soon as your pointer moves close to that line, the taskbar joyfully springs back into view.

Hiding the taskbar manually

When, on some random Tuesday, you decide to get the taskbar out of your hair *temporarily*—when reading a vast spreadsheet, for example—don't bother with the checkboxes described in the previous paragraphs. There's a quicker way to hide the taskbar: just drag it forcibly off the screen. Point to the inside edge of the taskbar, so that your cursor becomes a double-headed arrow, before dragging down.

Once again, a thin blue line represents the hidden edge. You can grab that line like a handle to pull the taskbar back onto the screen when you want it.

Taskbar Toolbars

Taskbar *toolbars* are separate, recessed-looking areas on the taskbar that offer special-function features. You can build your own toolbar, for example, stocked with documents related to a single project. (Somewhere in America, there's a self-help group for people who spend entirely too much time fiddling with this kind of thing.)

TROUBLESHOOTING MOMENT

Retrieving a Lost Hidden Taskbar

Sometimes, after manually hiding the taskbar (or going too far when you're trying to make it smaller), you can't get it back. The thin blue line disappears, or your mouse pointer won't turn into a double-headed arrow when you position it on the thin line. Here's how to fix the problem:

1. Press Ctrl+Esc. This keystroke selects the taskbar, even though you can't see it (although you can now see the Start menu).

2. Press Esc to make the Start menu disappear. (The taskbar is *still* selected, even though you can't see it.)

3. Press Alt+Space bar to bring up a shortcut menu.

4. Choose Size from the shortcut menu; this changes your mouse pointer into a four-sided shape. Don't click anything.

5. Press the arrow key that points toward the center of the screen (from the taskbar's perspective). As you do, the taskbar reappears.

6. Resize the taskbar very carefully to avoid repeating all of these steps.

HP Inc. - Exhibit 1007 - Page 112

To make a toolbar appear or disappear, right-click a blank spot on the taskbar and choose from the Toolbars shortcut menu (Figure 2-15). The ones with checkmarks are visible now; select one to make the toolbar (and checkmark) disappear.

Quick Launch Toolbar

The Quick Launch toolbar, once you've made it appear, is fantastically useful. In fact, in sheer convenience, it puts the Start menu to shame. It contains icons for functions that Microsoft assumes you'll use most often. They include:

- **Show Desktop**, a one-click way to minimize (hide) *all* the windows on your screen to make your desktop visible. Don't forget about this button the next time you need to burrow through some folders, put something in the Recycle Bin, or perform some other activity in your desktop folders. *Keyboard shortcut:* Windows key+D.

- **Launch Internet Explorer Browser**, for one-click access to the Web browser included with Windows XP.

- **Windows Media Player**, for one-click access to the music and movie player included with Windows XP (see Chapter 7).

The buttons detailed above are only hints of this toolbar's power, however. What makes it great is how easy it is to add your *own* icons—particularly those you use frequently. There's no faster or easier way to open them (no matter what mass of cluttered windows is on your screen), since the taskbar displays your favorite icons at all times.
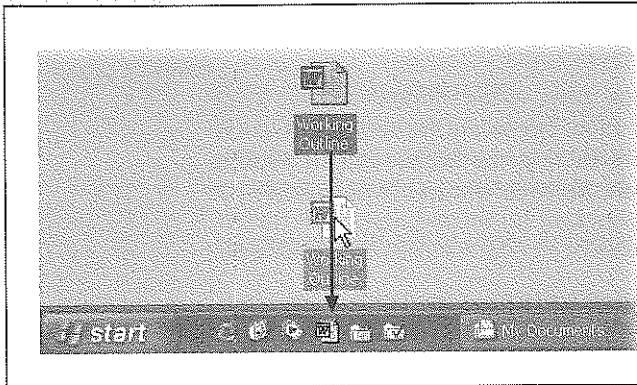
Figure 2-15:
Top: Make toolbars appear by right-clicking a blank area on the taskbar, if you can find one.

Bottom: Toolbars eat into your taskbar space, so use them sparingly. If you've added too many icons to the toolbar, a >> button appears at its right end. Click it to expose a list of the commands or icons that didn't fit.

Address toolbar   Desktop toolbar   Links toolbar
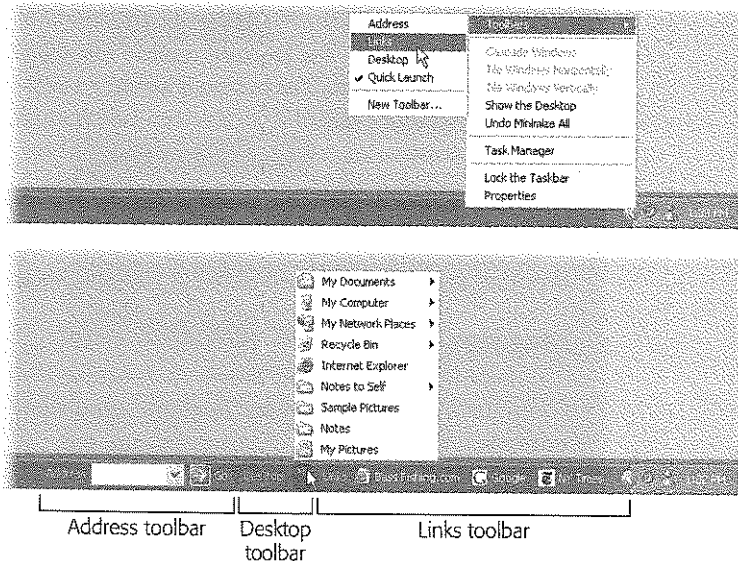
To add an icon to this toolbar, simply drag it there, as shown in Figure 2-16. To remove an icon, just drag it off the toolbar—directly onto the Recycle Bin, if you like. (You're not actually removing any software from your computer.) If you think you'll somehow survive without using Windows Media Player each day, for example, remove it from the Quick Launch toolbar.

Figure 2-16:
You can add almost any kind of icon (an application, document file, disk, folder, Control Panel, or whatever) to the Quick Launch toolbar just by dragging it there (top); a thick vertical bar shows you where it'll appear. The only challenge is to find the folder that houses the icon you want to add. If it's an application, see page 63 for hints on finding the actual icon of the program in question.

Desktop Toolbar

The Desktop toolbar offers quick access to whichever icons are sitting on your desktop—Windows Media Player, Word, and so on. This toolbar also provides quick access to icons that used to appear automatically on previous versions of Windows: My computer, My Network Places, My Documents, Recycle Bin, and Internet Explorer.

When it first appears, the Desktop toolbar may take the form of a >> button at the right end of the taskbar. The button is actually a pop-up menu that lists your desktop stuff. This could be useful if your screen becomes filled with windows, thus obscuring the desktop.

Address Toolbar, Links Toolbar

These toolbars are exactly the same as the window toolbars described on page 90—except that they appear in the taskbar at all times, instead of in desktop windows.

Language Bar Toolbar

The floating Language bar, shown in Figure 2-17, automatically appears on your computer's desktop and in the Toolbars menu when you install either of two components:

- **Text services.** That's Microsoft's catch-all phrase for certain text-related add-on software programs: a second keyboard layout, handwriting recognition, speech recognition, or an Input Method Editor (IME), which is a system that lets you input for example, Asian language characters with a standard 101-key keyboard.

- **Another language.** As described in Appendix A, you can install multiple input languages on your computer and, using the Language bar, switch between them when

the mood strikes. The language for the operating system doesn't change—only what characters appear onscreen when you type.

The buttons and options available on the Language bar depend on which text services you've installed and what application you're using. Microsoft Excel 2002 accepts speech recognition, for example, but Notepad doesn't.

Right-clicking the Language bar displays a shortcut menu where you can change its settings (see Figure 2-17). The shortcut menu lets you minimize the Language bar (Figure 2-17), make it transparent, shorten the bar by hiding its text labels, and so on. Only two of these options aren't self-explanatory:

- **Additional icons in taskbar.** When you minimize the Language bar, the taskbar shows only the icon for the language you're currently using (like EN for English, as shown in Figure 2-17.) If you'd like to run the Language bar minimized with all of the installed text-service icons at your disposal, turn on this option and then minimize. Now you can click the text-service icons on the taskbar.

- **Settings.** This option opens the Text Services and Input Languages dialog box, shown in Figure 2-17. In this dialog box, you select the installed input language you want to use when you boot up your computer, the text services that you prefer for each installed input language, and the Advanced keystroke settings for switching between input languages. For example, you can assign Left Alt+Shift+E to change to English (United States).


Figure 2-17:
Top left: The floating Language bar. Right-clicking this toolbar displays its shortcut menu.

Middle left: The shortcut menu for the Language bar lets you change Language bar settings, such as transparency, vertical (orientation), and minimize.

Bottom Left: When you minimize the Language bar, it shrinks down to the taskbar for easier access.

Right: The Text Services and Input Languages dialog box appears when you select Settings from the shortcut menu. Here you can change the current input language, set hot keys for language switching, and so on.
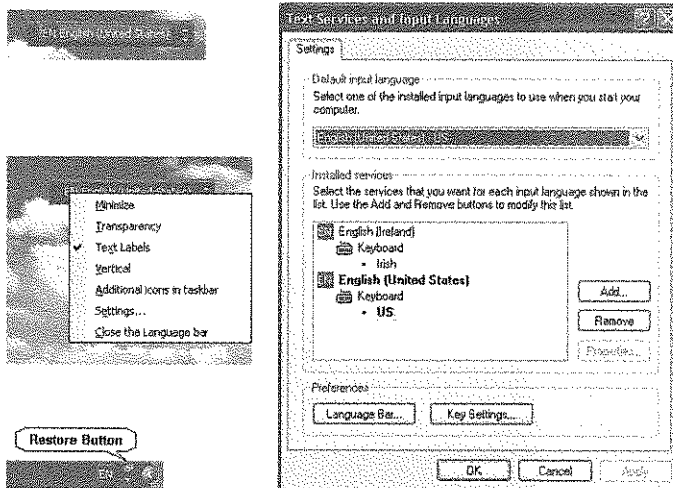
Redesigning Your Toolbars

To change the look of a toolbar, unlock the taskbar (using its shortcut menu), and then right-click any blank spot within the toolbar. (If the taskbar isn't unlocked, you